CLEONE SHOULDER WIDENING PROJECT

MENDOCINO COUNTY, CALIFORNIA

01 – MEN – 1 (Post Miles 65.13 to 65.49)

EA 01-0G600/EFIS 01 1700 0026

INITIAL STUDY

with Proposed Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

September 2020

General Information About This Document

What is in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study with proposed Mitigated Negative Declaration (IS/MND) which examines the potential environmental effects of a proposed project on State Route 1 in Mendocino County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA) for this proposed project. This document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read this document.
- Additional copies of this document and related technical studies are available for review on weekdays between 8:00 a.m. and 5:00 p.m. at the Caltrans District 1 Office at 1656 Union Street, Eureka, CA 95501. Due to COVID-19 concerns, please call (707) 441-5649 beforehand to make arrangements for document review under social distancing protocols. The Initial Study will also be available for public review at the Mendocino County Library at 499 East Laurel Street, Fort Bragg, CA 95437.
- This document may also be downloaded at the following website: https://ceqanet.opr.ca.gov
- Paper copies of this document and related technical studies are also available upon request. Please contact Jennifer Gagnon at (707) 441-5649 or by e-mail at Jennifer.Gagnon@dot.ca.gov.
- Due to restrictions on public gatherings stemming from COVID-19, a public open house will not be conducted for this project. Please use the resources outlined in this section to review the document(s), submit comments, and to ask questions.
- We'd like to hear what you think. If you have any comments about the proposed project, please send your written comments to Caltrans by the deadline: **October 16, 2020**.

- Please send comments via U.S. mail to:

  California Department of Transportation
  Attention: Jennifer Gagnon
  North Region Environmental - District 1
  1656 Union Street
  Eureka, CA 95501

- Send comments via e-mail to: Jennifer.Gagnon@dot.ca.gov

- Be sure to send comments by the deadline: **October 16, 2020.**

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may: (1) give environmental approval to the proposed project, (2) conduct additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, Caltrans could complete the design and construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Jennifer Gagnon-District 1, 1656 Union Street, Eureka, CA 95501; (707) 441-5649 Voice, or use the California Relay Service TTY number, 711 or 1-800-735-2929.

CLEONE SHOULDER WIDENING PROJECT

Widen shoulders and improve drainage features on State Route 1 in Mendocino County from post miles 65.13 to 65.49 in Cleone, California

INITIAL STUDY

with Proposed Mitigated Negative Declaration

Submitted Pursuant to: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA

Department of Transportation

09/04/2020

Date of Approval

Brandon Larsen, Office Chief
North Region Environmental-District 1
California Department of Transportation
CEQA Lead Agency

The following person may be contacted for more information about this document:

Jennifer Gagnon, North Region Environmental - District 1
1656 Union Street, Eureka, CA 95501
(707) 441-5649
or use the California Relay Service TTY number, 711 or 1-800-735-2929.

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, California Public Resources Code

SCH Number: Pending

Project Description

The California Department of Transportation (Caltrans) proposes to widen narrow shoulders to four feet and improve drainage features on State Route (SR) 1 in Cleone from post miles (PMs) 65.13 to PM 65.49 in Mendocino County. The project is being proposed to address a higher than statewide average collision rate within the project limits and improve safety conditions along this portion of SR 1.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant impact on the environment for the following reasons:

The project would have *No Effect* on Agriculture and Forest Resources, Air Quality, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Wildfire.

The proposed project would have *Less Than Significant Impacts* with regard to Aesthetics, Greenhouse Gas Emissions, and Utilities and Service Systems.

With the following mitigation measures incorporated, the project would have less than significant impacts to Biological Resources.

- Caltrans would coordinate with resource agencies to determine appropriate restoration and/or mitigation ratios and measures for the loss of up to 0.052 acre of jurisdictional waters protected under Sections 404 and 401 of the Clean Water Act and 0.008 acre of waters protected under the California Coastal Act as a result of project activities.

Brandon Larsen, Office Chief
North Region Environmental-District 1
California Department of Transportation

Date

Table of Contents

List of Appendices

List of Tables

List of Figures

List of Abbreviated Terms

Abbreviation	Description
AB	Assembly Bill
BMPs	Best Management Practices
BO	Biological Opinion
BSA	Biological Study Area
°C	Celsius
CAFE	Corporate Average Fuel Economy
CALFIRE	California Department of Forestry and Fire Protection
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CAPM	Capital Preventative Maintenance
CARB	California Air Resources Board
CCA	California Coastal Act
CCR	California Code of Regulations
CCT	California Coastal Trail
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CF	Cubic Feet
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGP	Construction General Permit
CH_4	Methane
CIA	Cumulative Impact Analysis
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO_2	Carbon Dioxide
CSP	Corrugated Steel Pipe
CTP	California Transportation Plan
CW	Coastal Wetlands
CWA	Clean Water Act
DBH	Diameter at Breast Height
DI	Drainage Inlet
DPP	Design Pollution Prevention
DSA	Disturbed Soil Area
ECP	Elliptical Concrete Pipe
EIR	Environmental Impact Report

Abbreviation	Description
EO	Executive Order
EPA	Environmental Protection Agency
ESHA(s)	Environmentally Sensitive Habitat Area(s)
ESL	Environmental Study Limits
ESU	Evolutionarily Significant Unit
°F	Fahrenheit
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRMette	Flood Insurance Rate Map
FP	Fully Protected
GHG	Greenhouse Gas
GWP	Global Warming Potential
H&SC	Health & Safety Code
HFCs	Hydrofluorocarbons
HMA	Hot Mix Asphalt
IPaC	Information for Planning and Conservation
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ISA	Initial Site Assessment
ITP	Incidental Take Permit
LCFS	Low Carbon Fuel Standard
Lmax	Maximum Sound Level with A-weighted Frequency
MBTA	Migratory Bird Treaty Act
MCOG	Mendocino Council of Governments
MLD	Most Likely Descendent
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
MPH	Miles per Hour
MPO	Metropolitan Planning Organization
N_2O	Nitrous Oxide
NAHC	Native American Heritage Commission
NCRWQCB	North Coast Regional Water Quality Control Board
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic Safety Administration
NIS	New Impervious Surface
NMFS	National Marine Fisheries Service
NNI	Net New Impervious
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent

Abbreviation	Description
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRLF	Northern red-legged frog
NWP	Nationwide Permit
OHWM	Ordinary High-Water Mark
OWs	Other Waters of the U.S. and State
PCBR	Pacific Coast Bike Route
PDT	Project Development Team
PM	Particulate Matter
PM(s)	Post Mile(s)
PPDG	Project Planning and Design Guide
PRC	Public Resources Code
RIS	Replaced Impervious Surface
ROW	Right of Way
RTP	Regional Transportation Plan
SCS	Sustainable Communities Strategy
SF_6	Sulfur Hexafluoride
SHS	State Highway System
SNC(s)	Sensitive Natural Community (Communities)
SR	State Route
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
THVF	Temporary High-Visibility Fencing
TMDLs	Total Maximum Daily Loads
TMP	Transportation Management Plan
U.S. or US	United States
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDA	U.S. Department of Agriculture
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGCRP	U.S. Global Change Research Program
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
WPCP	Water Pollution Control Plan
WQOs	Water Quality Objectives
WRCC	Western Regional Climate Center

Chapter 1. Proposed Project

1.1. Project History

The proposed Cleone Shoulder Widening Project (project) was initiated by the California Department of Transportation (Caltrans) Traffic Safety Division in response to safety concerns identified in an investigation on this segment of State Route (SR) 1. Within a five-year period between 2009 and 2014 there were a total of nine collisions on this segment of highway, with a collision rate six times higher than the statewide collision average. Three of these collisions resulted in injury and six were run-off-the road collisions. In response to the investigation findings, Caltrans recommended shoulder widening along this narrow two-lane road to reduce the frequency and severity of collisions.

In 1976, the State designated SR 1 as the Pacific Coast Bicentennial Bike Route, subsequently renamed the Pacific Coast Bike Route (PCBR) in the early 1990s. The project limits are also within a segment identified in the 2012 Coastal Trail/Pacific Coast Bike Route Feasibility Study as one of the two highest priority segments on SR 1 for shoulder widening. This section of SR 1 is a two-lane conventional highway with a curvilinear alignment. Within the project limits, each lane is 11 to 12-feet, with zero to one-foot paved shoulders. No marked bikeways, sidewalk or walkways exist.

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA) for the project.

1.2. Project Description

Caltrans proposes to widen shoulders to four feet and improve drainage features on SR 1 in Cleone from post miles (PMs) 65.13 to PM 65.49 in Mendocino County (Figures 1 and 2). The project is being proposed to address a higher than statewide average collision rate within the project limits and improve safety conditions along this portion of SR 1. The posted speed limit at this location is 35 miles per hour (mph).

Project Objective (Purpose and Need)

The purpose of this project is to reduce the frequency and severity of collisions.

The project is needed because within a five-year period between 2009 and 2014 this segment of highway had a total of nine collisions, which is over six times higher than the statewide average.

Proposed Project

The project's proposed scope of work includes the following:

- Install, remove, and replace various culvert sections, including those adjacent to the east side of the northbound lane of SR 1, one that crosses under SR 1, and one adjacent to the west side of the southbound lane of SR 1.
- Cut and fill grading to allow proper placement of new, relocated, and replaced culverts.
- Install hot mix asphalt (HMA) trapezoidal (Type A) dikes adjacent to the east side of the northbound lane of SR 1 (see Appendix A; sheets L-1 to L-4), with gaps in coverage between each private driveway or road.
- Relocate and install up to 13 drainage inlets within the existing Caltrans right of way (ROW), with 12 of the 13 inlets installed on the east side of SR 1 and one inlet installed on the west side of SR 1 (see Appendix A; sheets L-1 to L-4).
- Widen the road shoulders to four feet on each side of SR 1 and pave the new shoulder width.
- Repave with HMA, restripe, and realign driveways and intersections to conform to the new alignment.
- Relocate up to 15 utility poles and associated guy wires to accommodate the widened shoulders (see Appendix A: sheets L-1 to L-4).
- Create vegetated biofiltration swales for stormwater runoff treatment on both sides of SR 1.

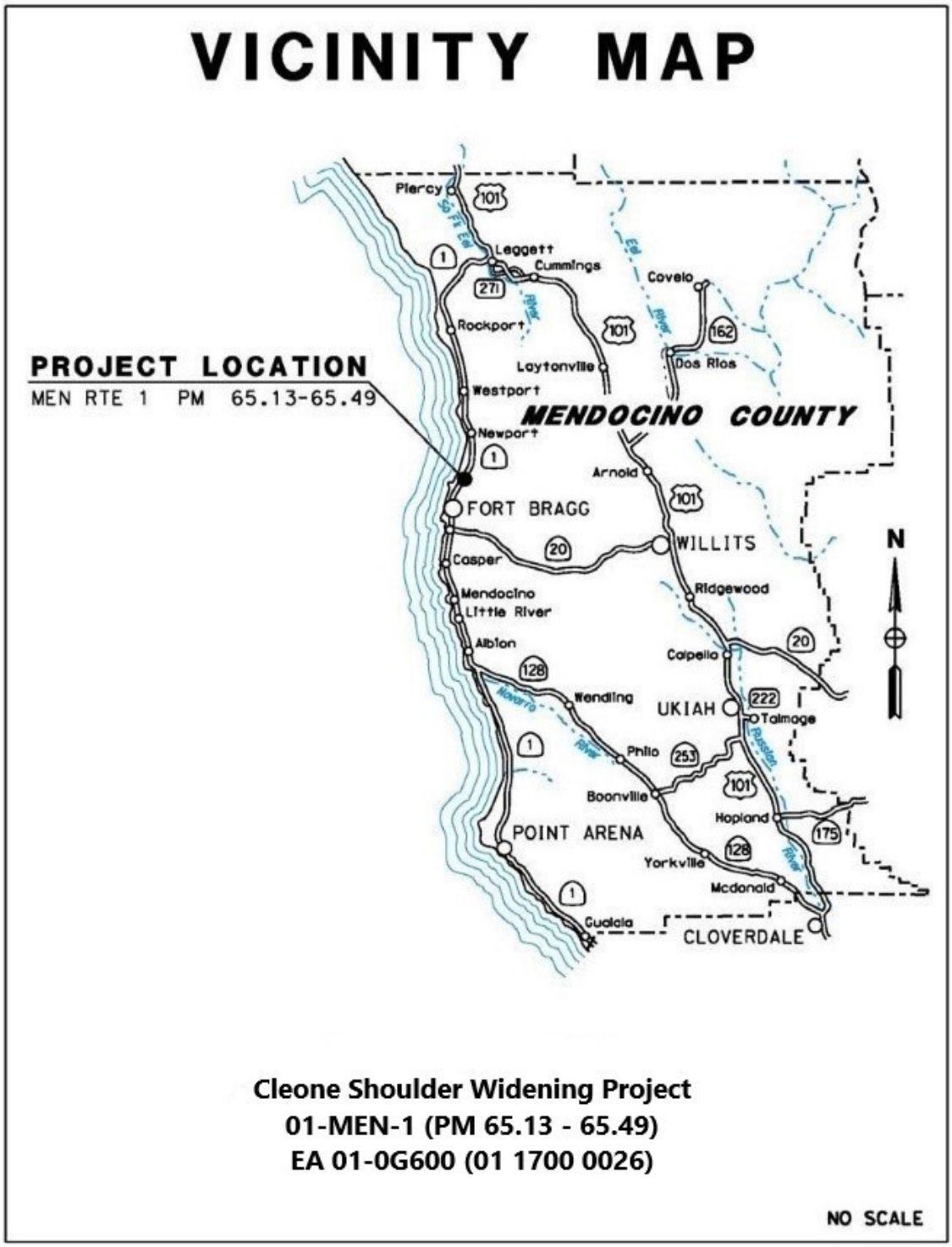


Figure 1. **Project Vicinity Map**

Figure 2. Project Location Map

Access Roads and Staging

Access roads would not be required as all areas would be accessed directly from SR 1. Staging would be within the existing Caltrans right of way at street intersections and south of the construction limits, just east of the northbound lane of traffic at PM 65.13 extending approximately 200 feet south (Appendix A, sheet L-1).

Construction Equipment

Typical equipment used for construction includes asphalt pavers, cranes, excavators, backhoes, manlifts, pickup trucks, compactors, portable generators, boom trucks, hauling and dump trucks, concrete trucks, saw cutters, pumps, jackhammers, cold planers, and wheel loaders.

Shoulder Widening

Shoulder widening would begin with roadway excavation, including embankment, excavation, and compaction. Existing asphalt concrete would be cold planed. Class 2 aggregate base would be placed and then the roadway would be paved with HMA. Hot mix asphalt dike would then be constructed, followed by final striping of the roadway (Appendix A, Sheets L-1 through L-4).

The proposed project would result in the addition of 0.22 acre of new impervious surface area (NIS). Permanent stormwater treatment would be implemented at a 1:1 ratio with the creation of bioswales and Design Pollution Prevention Infiltration Areas (DPPIA).

Drainage Improvements

The storm drain system is a combination of structures/pipes that have been added at various times and incorporate side drainage inlets from private properties to the east and under driveways. A hydraulics field review of the system determined that the storm drain is in need of replacement as the inlets, grates and pipes are deteriorated. Up to 13 drainage inlets would be replaced or newly installed. Minor concrete backfill would be used at locations where existing clearance over the pipe is less than 2 feet. The culvert parallel to SR 1, located under the private roadway at Nameless Lane, would be removed and replaced. The length of the entire existing storm drain, beginning at this culvert and extending to an outlet west of SR 1 at PM 65.16, is 500 feet. Table 1 summarizes the proposed project culvert work.

Table 1. Existing and Proposed Culverts within the Project Limits

Location	Existing System	Proposed Work
PMs 65.13 to 65.16	24-inch-diameter corrugated steel pipe (CSP).	The culvert would be removed and the area would be repurposed as a vegetated bioswale.
PM 65.16	The existing 24-inch-diameter CSP culvert runs underground SR 1 from the east to west and outlets at PM 65.16.	The culvert would be replaced with a 24-inch-diameter elliptical concrete pipe (ECP).
PMs 65.16 to 65.17	None.	The proposed culvert is 52 feet long and is a 24-inch-diameter CSP. The culvert would begin at PM 65.17, where a drainage inlet (DI) would be installed, and flow southwest towards the existing outlet at PM 65.16.
PMs 65.20 to 65.21	Existing culvert is an 18-inch-diameter CSP.	Proposed culvert is a 24-inch-diameter CSP.
PMs 65.23 to 65.28	Existing culvert is an 18-inch-diameter CSP.	Proposed culvert is a 24-inch-diameter ECP.
PMs 65.28 to 65.29	Existing feature is an open-air roadside ditch.	Proposed culvert is a 24-inch-diameter ECP.
PMs 65.29 to 65.30	Existing culvert is an 18-inch-diameter CSP.	Proposed culvert is a 24-inch-diameter ECP.
PMs 65.30 to 65.36	Existing feature is an open-air roadside ditch.	Proposed culvert is a 24-inch-diameter ECP.
PMs 65.36 to 65.37	Existing culvert is an 18-inch-diameter CSP.	Proposed culvert is a 24-inch-diameter ECP.

Excavated Material

Excavated material would either be used as needed backfill material during construction or hauled away to an approved permitted disposal site. Any necessary temporary storage site would use Best Management Practices (BMPs) to prevent sediment runoff beyond the ESL.

Disturbed Soil Areas

As part of the project, fill would be placed and cuts would be made, primarily within the drainage ditch running parallel to the northbound lane of SR 1 between PMs 65.28 and 65.36 (except for the driveway between PMs 65.29 and 65.30) (Appendix A, Cross Section Plans X-1 through X-3). The total disturbed soil area for the project would be approximately 1.2 acres.

Utility Relocation

The project activities would include relocating up to 15 utility poles and associated guy wires to accommodate widening of the shoulders. Exact locations would be specified in later project phases between utility companies and Caltrans but would be within the ESL and approved prior to relocation activities.

Construction Schedule

Construction activities are anticipated to begin by June 2022 and completed in approximately 70 working days. Construction will comply with work windows identified in permit conditions and those necessary for protection of listed species and species of special concern.

Night Work

Night work is not anticipated. However, there may be night work if construction needs to be accelerated. Any night work would be subject to the county noise limitation of 86 decibels (dB) at 50 feet.

Site Cleanup and Revegetation

After completion, all materials used for the shoulder widening, drainage improvements, and staging would be completely removed from the site. The site would then be restored to a natural setting by regrading and revegetating with native plants, as required by the final approved Revegetation and Erosion Control plans. Wetland vegetation would be planted from November 1 to February 28 in the year following completion.

Traffic Control

To ensure continued access and use of SR 1 to all roadway users during project activities, Caltrans would utilize controlled one-way traffic flow and crews working in the lane closed to traffic. Any impacts to traffic would be temporary in nature. In addition, access to driveways, houses, and cross streets would be maintained. Emergency service vehicles, pedestrians, and bicyclists would be accommodated throughout the work zone. The project would follow a Transportation Management Plan (TMP).

Biofiltration Swales

The proposed project would increase impermeable surface area due to the added shoulder on both sides of SR 1. The project would require permanent treatment BMPs in the form of vegetated biofiltration swales to slow and absorb stormwater runoff.

1.3. No-Build Alternative

The No-Build Alternative would maintain the facility in its current condition and would not meet the purpose and need of the project. For each potential impact area discussed in Chapter 2, the No-Build Alternative has been determined to have no impact. Under the No-Build alternative, no alterations to the existing conditions would occur and the proposed improvements would not be implemented. The No-Build alternative is not discussed further in this document.

1.4. Alternatives Considered but Eliminated from Further Consideration

A previous alternative that would have required additional right of way on the northwesterly side of the project was rejected by the Project Development Team (PDT). The need for additional right of way was avoided by using a different project design, which shifted the proposed alignment east of the existing centerline approximately 0 feet to 5 feet.

1.5. General Plan Description, Zoning, and Surrounding Land Uses

Adopted in 2009, the Mendocino County General Plan (General Plan) identifies planning principals and goals for development within Mendocino County. The planning principals and goals in the General Plan related to this project are as follows:

Overall Planning Principles

Principle 2-1c Emphasize compatibility between human activity and environmental resources and processes at all levels from regional planning to site design.

General Land Use Policies–Development Element

Policy DE-40 Maintain communities as distinct places with visual separation.

Policy DE-69 Emphasize local community character and culture in community planning and development.

Policy DE-128 Ensure that transportation infrastructure accommodates the safety and mobility of motorists, pedestrians, bicyclists, and persons in wheelchairs.

Policy DE-137 Develop and improve a roadway system that facilitates orderly development and serves the multiple needs of existing and future development.

Coastal Element Policies

CE Policy 3.8-2 Current studies indicate a need for future improvement to certain stretches of Highway 1 and to major intersections. These improvements shall be encouraged so as to accommodate essential industries vital to the economic health of the County and other priority uses under the Coastal Act.

The Department of Transportation shall be requested and urged as a high priority of public interest and Coastal Act purpose to:

1. Accelerate highway improvement projects along Highway 1 and those state maintained highway intersections within the Coastal Zone of Mendocino County.

2. Develop a long range comprehensive circulation plan for Mendocino County coastal state highways and tributaries consistent with Coastal Act mandates.

If the objectives of the Coastal Act are to be met, these goals must receive high priority at both local and state levels.

CE Policy 3.8-5 Caltrans shall, in cooperation with the County, set priorities based on safety requirements and existing highway congestion for improving the capacity of impacted segments of Highway 1. Measures to be studied should include minor re-alignments, width and shoulder improvements, passing lanes, view turnouts and parking areas, and intersection improvements.

CE Policy 3.8-6 It shall be a goal of the Transportation Section to achieve, where possible and consistent with other objectives of The Coastal Act and plan policies for Highway 1, a road bed with a vehicle lane width of 16 feet including the shoulder to achieve a 32-foot paved roadway (12-foot vehicle lane and 4-foot paved shoulder). The minimum objective shall be a 14-foot vehicle lane width (10-foot vehicle lane and 4-foot paved shoulder). New widening projects shall be allocated, first to safety and improved capacity needs and secondly to paved shoulders.

CE Policy 4.3-1 Caltrans shall be directed to prepare a plan for widening the present alignment of Highway 1 from the north city limits of Fort Bragg to the north limits of Cleone rural village. Lane width shall be 12 feet, shoulder width 4 feet.

Goals Based on the Planning Principles of the General Plan

Goal DE-8 A balanced and coordinated transportation system that:

- Is an integrated and attractive part of each community.
- Is functional, safe and pleasant to use, and supports emergency services.
- Provides a choice of modes accessing and connecting places frequented in daily life.
- Promotes compact development and infrastructure efficiencies.
- Is consistent with principles of sustainability and conservation of resources.
- Is not solely dependent on the continuation of fossil fuel resources.
- Can be maintained, used, and justified if available energy sources change during the duration of the General Plan.

Goal DE-9 A countywide road system that provides safe, efficient and attractive access, coordinated with interstate, state, local and areawide systems.

Goal DE-10 Functional, safe and attractive pedestrian and bicycle systems coordinated with regional and local transportation plans and other transportation modes.

The County of Mendocino (2016) identifies the following designated zones within the project area:

- RR1 (Single Family Residential)
- RV (Rural Village)
- C1 (Inland Limited Commercial)
- RR5 (Multiple Family Residential)
- RR2 (Two Family Residential)
- RMR40 (Rural Remote Residential 40 Acre Minimum)

The proposed project would not change the zoning designation or surrounding land uses at the project location.

1.6. Permits and Approvals Needed

Table 2 identifies the permits, licenses, agreements, and/or certifications that are required for project construction.

Table 2. Agency Approvals

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	1602 Lake and Streambed Alteration Agreement	Obtain after Final Environmental Document (FED) approval.
County of Mendocino	Local Coastal Development Permit	Obtain after FED approval.
North Coast Regional Water Quality Control Board (NCRWQCB)	Section 401 Water Quality Certification	Obtain after FED approval.
U.S. Army Corps of Engineers (USACE)	Section 404 Nationwide Permit (NWP) 14	Obtain after FED approval.

1.7. Standard Measures and Best Management Practices Included in the Proposed Project

Aesthetics Resources

AR-1: Riparian and wetland areas impacted by proposed project activities would be replanted with regionally-appropriate native plants.

AR-2: Alterations to the existing contours of any temporary construction staging areas created by the contractor would be graded to previous conditions and revegetated with regionally-appropriate native plants.

AR-3: Disturbed soil areas impacted by widening work would be applied with erosion control measures to cover bare soil.

AR-4: Limit all construction lighting to within the area of work and avoid light trespass through directional lighting, shielding, and other measures as needed.

AR-5: Minimize the removal of, and avoid where feasible, established trees and vegetation. Environmentally sensitive areas (ESA) will have Temporary High Visibility Fencing (THVF) installed to demarcate areas where vegetation is being preserved and root systems of trees shall be protected.

AR-6: Pruning practices are to adhere to ANSI A 300 part 1, Pruning published by the Tree Care Industry Association, per the Departments' Standard Specifications.

Animal Species

AS-1: To protect migratory and nongame birds, and their occupied nests and eggs, nesting-prevention measures would be implemented. Vegetation removal would be restricted to the period outside of the bird breeding season (September 16 through January 31) or, if vegetation removal is required during the breeding season, a nesting bird survey would be conducted by a qualified biologist within one week prior to vegetation removal. If an active nest is located, the biologist would coordinate with the CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.

AS-2: Partially constructed and unoccupied nests within the construction area would be removed and disposed of on a regular basis throughout the breeding season (February 1 to September 15) to prevent their occupation. Nest removal would be repeated weekly under guidance of a qualified biologist to ensure nests are inactive prior to removal.

AS-3: Pre-construction surveys for active raptor nests within one-fourth mile of the project area would be conducted by a qualified biologist within 15 days prior to initiation of construction activities. Areas to be surveyed would be limited to those areas subject to increased disturbance because of construction activities (i.e., areas where existing traffic or human activity is greater than or equal to construction-related disturbance need not be surveyed). If any active raptor nests are identified, appropriate conservation measures (as determined by a qualified biologist) would be implemented. These measures may include, but are not limited to, establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities near the active nest site until the young have fledged.

AS-4: Areas proposed for tree removal for utility relocation or road widening in suitable habitat (e.g., trees with large cavities, snags) must be surveyed by a qualified contractor-supplied biologist no less than 7 days and no more than 14 days prior to the beginning of tree removal (regardless of season) to determine if day roosting bats are present. If any day roost sites are detected, tree removal must occur during the fall season—after the bat maternity season (ending August 31) and before bats begin hibernating or migrating (October 31). Within this period, a qualified bat biologist would provide CDFW with a bat exclusion plan. The bat biologist shall continue monitoring the roost with acoustic surveys to ensure no bats are in the roosts before trees are removed.

AS-5: Trees required for removal that have a DBH of 12 inches or less shall be felled one day and the following day the remaining trees may be felled. This order of tree removal is intended to disturb tree roosting bats in the larger trees on day one while smaller trees are being removed. Due to the disturbance, bats roosting in larger trees would mobilize into adjacent forests where auditory disturbances are not present.

Cultural Resources

CR-1: Caltrans would continue to consult with the following tribes: Sherwood Valley Rancheria; Cloverdale Rancheria; Coyote Valley Rancheria; Hopland Rancheria; Cahto Tribe of Laytonville Rancheria; Manchester Point Arena Band of Pomo Indians; Pinoleville Pomo Nation; and the Round Valley Indian Tribe.

CR-2: If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer.

CR-3: If human remains are discovered, State Health and Safety Code § 7050.5 states that further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to CA Public Resources Code (PRC) § 5097.98, if the remains were thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

At that time, the person who discovered the remains would contact the Cultural Environmental Senior and Professionally Qualified Staff so they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC § 5097.98 would be followed as applicable.

Geology and Seismic/Topography

GS-1: The project would be designed to minimize slope failure, settlement, and erosion using recommended construction techniques and Best Management Practices (BMPs). New slopes would be revegetated to reduce erosion potential.

GS-2: In the unlikely event that fossils are encountered during project excavations, Caltrans Standard Specification 14-7 would be followed. This standard specification states that if unanticipated paleontological resources are discovered at the job site, all work within 60 feet would stop, the area around the fossil would be protected, and the Resident Engineer would be notified.

Greenhouse Gas Emissions

GHG-1: The construction contractor must comply with the 2018 Caltrans Standard Specifications in Section 14-9. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including the Mendocino Air Quality Management District regulations and local ordinances.

GHG-2: Compliance with Title 13 of the California Code of Regulations (CCR), which includes idling restrictions of construction vehicles and equipment to no more than 5 minutes.

GHG-3: Caltrans 2018 Standard Specification 7-1.02C "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board.

GHG-4: Utilize a Transportation Management Plan (TMP) to minimize vehicle delays.

GHG-5: To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

Hazardous Waste and Material

HW-1: Per Caltrans requirements, the contractor(s) would prepare a project-specific Lead Compliance Plan (CCR Title 8, § 1532.1, the “Lead in Construction” standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of lead-impacted soil.

Plant Species

PS-1: After all construction materials are removed, the project area would be revegetated. Replanting would be subject to a plant establishment period as defined by project permits, which would require Caltrans to adequately water plants, replace unsuitable plants, and control pests. Caltrans would implement a program of invasive weed control in all areas of soil disturbance caused by construction to improve habitat for native species in and adjacent to disturbed soil areas within the project limits.

PS-2: The contractor would be required to place temporary barrier fencing along the boundaries of all riparian, wetland, or other environmentally sensitive areas to avoid impacts to sensitive habitats that occur adjacent to the project footprint.

Threatened and Endangered Species

TS-1: Prior to any construction activities or grading below the Ordinary High-Water Mark (OHWM) of jurisdictional waters of the U.S. and State, a qualified contractor-supplied biologist would survey the anticipated work area for the presence of Northern red-legged frog (NRLF) and any other potentially present aquatic species. Any amphibians or reptiles located would require a temporary disturbance buffer of 25 feet until the animal vacates the area. If the animal is in imminent danger or expected to delay construction, then the animal may be safely relocated to suitable habitat outside the project area.

TS-2: A qualified contractor-supplied biologist would monitor all construction activities in jurisdictional waters, and be present during dewatering activities, drilling, concrete pours, and road and shoulder grading to ensure adherence to all environmental permit conditions and avoidance and minimization measures during construction.

TS-3: The pre-construction meeting with the contractor would consist of a briefing on environmental permit conditions and requirements relative to each stage of the proposed project, including, but not limited to: ESAs, work windows, construction site management, and how to identify and report regulated species within the project areas.

TS-4: Artificial night lighting may be required. To reduce potential disturbance to sensitive species, the use of artificial lighting would be temporary and of short duration and would be focused specifically on the area under construction.

Transportation

TT-1: Pedestrian and bicycle access would be maintained during construction.

TT-2: The Contractor would be required to reduce any access delays to driveways or public roadways within or near the work zones.

TT-3: A Transportation Management Plan (TMP) would be applied to the project.

Utilities and Emergency Services

UE-1: All emergency response agencies in the project area would be notified of the project construction schedule and would have access to SR 1 throughout the construction period.

UE-2: Caltrans would coordinate with the utility providers before relocation of any utilities to ensure potentially affected utility customers would be notified of potential service disruptions before relocations.

Water Quality and Stormwater Runoff

WQ-1: The project would comply with the Provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2012-0011-DWQ), which became effective July 1, 2013, and the Construction General Permit Order 2009-0009-DWQ (as amended by Orders 2010-0014-DWQ and 2012-0006-DWQ).

Before any ground-disturbing activities, the contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) (per the Construction General Permit Order 2009-0009-DWQ) that includes erosion control measures and construction waste containment measures to protect waters of the State during and after project construction.

The SWPPP would identify the sources of pollutants that may affect the quality of stormwater; include construction site Best Management Practices (BMPs) to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the *Storm Water Quality Handbooks: Construction Site BMPs Manual* to control and reduce the impacts of construction-related activities, materials, and pollutants on the watershed.

The project SWPPP would be continuously updated to adapt to changing site conditions during the construction phase.

Construction would likely require the following temporary construction site BMPs:

1. Development of a schedule that includes sequencing of construction activities with implementation of construction site BMPs (SS-1).

2. Existing vegetation would be removed to the minimum extent necessary to facilitate the proposed work (SS-2).

3. Implement proper vehicle and equipment cleaning, fueling, and maintenance procedures to minimize or eliminate discharge of pollutants (NS-8, NS-9, NS-10).

4. Temporary access road entrances and exits would be stabilized and maintained to prevent sediment erosion and transport from the work area (TC-1).

5. Temporary drainage inlet protection methods such as gravel bags would be deployed to prevent sediment and other pollutants from entering drainage systems (SC-10).

6. Perimeter control devices such as fiber rolls, compost socks, gravel bags, and silt fences would be utilized to prevent sediment transport from the project site (SC-1, SC-5, SC-6, SC-11).

7. Use proper procedures and practices for proper handling, storage, and use of construction materials which minimizes or eliminates discharge into receiving waters (WM-1, WM-2).

8. Stockpile management procedures and practices are to be followed to reduce or eliminate air and storm water pollution from soil/material stockpiles (WM-3).

9. Spill prevention and control procedures and practices are implemented to prevent and control spills in a manner that minimizes or prevents discharge of material to watercourse (WM-4).

10. Solid waste management procedures and practices are to be adhered to which are designed to minimize or eliminate discharge of pollutants to the water body due to creation, stockpiling, or removal of construction site wastes (WM-5).

11. Liquid waste created during construction must be managed to prevent discharge into the receiving water body (WM-10).

12. The elimination or reduction of construction site sanitary and septic waste material discharge is to be recognized and proper procedures/practices are to be followed (WM-9).

13. Dewatering operations would be implemented to manage the discharge of pollutants from the accumulation of groundwater associated with excavations, temporary stream crossings, and clear water diversions (NS-2, NS-4, NS-5).

14. Paving and sealing operations would be conducted to avoid and minimize the discharge of pollutants to receiving waters (NS-3).

WQ-2: The project would incorporate pollution prevention and design measures consistent with the 2016 Caltrans Storm Water Management Plan to meet Water Quality Objectives (WQOs). This plan complies with the requirements of the Caltrans Statewide NPDES Permit (Order 2012-0011-DWQ).

The project design would likely include the following permanent stormwater treatment BMPs:

– Vegetated surfaces would feature native plants, and revegetation would use the seed mixture, mulch, tackifier, and fertilizer recommended in the Erosion Control Plan prepared for the project.

– Existing roadway and bridge drainage systems currently discharge stormwater to receiving waters through bridge deck drains and/or discharge to vegetated slopes adjacent to the highway facility. The current design for stormwater management, post construction, is to perpetuate existing drainage patterns. Stormwater would continue to sheet flow to vegetated slopes providing stormwater treatment in accordance with Caltrans NPDES Permit.

Wetlands and Other Waters

WW-1: The contractor would be required to place temporary barrier fencing along the boundaries of all riparian, wetland, or other environmentally sensitive areas adjacent to the project footprint.

WW-2: Impacts to waters and riparian vegetation would be reduced with incorporation of measures identified in Section 2.4, Biological Resources.

WW-3: Caltrans would be required to restore wetland and riparian areas temporarily impacted by construction to pre-existing conditions prior to completion of construction.

Visual Resources

VIS-1: Erosion control measures to cover bare soil would be applied to all disturbed soil areas impacted by widening work.

VIS-2: Minimize the removal of, and avoid where feasible, established trees and vegetation. Environmentally sensitive areas would have Temporary High-Visibility Fencing (THVF) installed to demarcate areas to preserve vegetation and protect root systems of trees.

1.8. Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation supporting a Categorical Exclusion determination would be prepared in accordance with the National Environmental Policy Act (NEPA). When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special status species by the National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS)—in other words, species protected by the Federal Endangered Species Act [FESA]).

Chapter 2. CEQA Environmental Checklist

Environmental Factors Potentially Affected

The environmental factors noted below would be potentially affected by this project. Please see the CEQA Environmental Checklist on the following pages for additional information.

Potential Impact Area	**Impacted: Yes / No**
Aesthetics	**Yes**
Agriculture and Forestry	No
Air Quality	No
Biological Resources	**Yes**
Cultural Resources	No
Energy	No
Geology and Soils	No
Greenhouse Gas Emissions	**Yes**
Hazards and Hazardous Materials	No
Hydrology and Water Quality	No
Land Use and Planning	No
Mineral Resources	No
Noise	No
Population and Housing	No
Public Services	No
Recreation	No
Transportation	No
Tribal Cultural Resources	No
Utilities and Service Systems	**Yes**
Wildfire	No
Mandatory Findings of Significance	No

The CEQA Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project would indicate there are no impacts to a particular resource. A "No Impact" answer in the last column of the checklist reflects this determination.

The words "significant" and "significance" used throughout the checklist and this document are only related to potential impacts pursuant to CEQA. The questions in the CEQA Environmental Checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project as well as standard measures applied to all or most Caltrans projects (such as Best Management Practices [BMPs] and measures included in the Standard Plans and Specifications or as Standard Special Provisions), are an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

CEQA broadly defines "project" to include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (14 California Code of Regulations [CCR] § 15378). Under CEQA, normally the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began. However, it is important to choose the baseline that most meaningfully informs decision-makers and the public of the project's possible impacts. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record. The CEQA Guidelines require a "statement of the objectives sought by the proposed project" (14 CCR § 15124(b)).

CEQA requires the identification of each potentially "significant effect on the environment" resulting from the action, and ways to mitigate each significant effect. Significance is defined as "Substantial or potentially substantial adverse change to any of the physical conditions within the area affected by the project" (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

The legal standard for determining the significance of impacts is whether a "fair argument" can be made that a "substantial adverse change in physical conditions" would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in an area of environmental review can make this determination.

Though not required, CEQA suggests Lead Agencies adopt thresholds of significance, which define the level of effect above which the Lead Agency would consider impacts to be significant, and below which it would consider impacts to be less than significant. Given the size of California and it's varied, diverse, and complex ecosystems, as a Lead Agency that encompasses the entire State, developing thresholds of significance on a state-wide basis has not been pursued by Caltrans. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts in the project area based on their location and the effect of the potential impact on the resource as a whole. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a "less than significant" determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered "significant."

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a negative declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed negative declaration must be circulated for public review, along with a document known as an Initial Study. CEQA allows for a "Mitigated Negative Declaration" in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

Although the formulation of mitigation measures shall not be deferred until some future time, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review. The lead agency must: (1) commit itself to the mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure. Compliance with a regulatory permit or other similar processes may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (§15126.4(a)(1)(B)).

Per CEQA, measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)). Under CEQA, mitigation is defined as avoiding, minimizing, rectifying, reducing, and compensating for any potential impacts (CEQA §15370).

Regulatory agencies may require additional measures beyond those required for compliance with CEQA. Though not considered "mitigation" under CEQA, these measures are often referred to in an Initial Study as "mitigation", Good Stewardship or Best Management Practices. These measures can also be identified after the Initial Study/Negative Declaration is approved.

CEQA documents must consider direct and indirect impacts of a project (CAL. PUB. RES. CODE § 21065.3). They are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

2.1. Aesthetics

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect on a scenic vista?	N/A	N/A	N/A	✓
Would the project: b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	N/A	N/A	N/A	✓
Would the project: c) 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 a 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?	N/A	N/A	✓	N/A
Would the project: d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	N/A	N/A	N/A	✓

A "No Impact" determination was made for Questions a), b) and d) based on the project scope, description, and the Visual Impact Assessment (VIA) dated June 3, 2020 (Caltrans 2020a). See below for further discussion of the "Less Than Significant Impact" determination made for Question c).

Regulatory Setting

The California Environmental Quality Act (CEQA) establishes it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

Environmental Setting

The proposed project is located on SR 1 which traverses much of California's coast, following nearly the full length of the Mendocino County coastline. State Route 1 is eligible for designation as a State Scenic Highway. The entire SR 1 corridor within the county is considered sensitive regarding visual and scenic resources and is known for scenic views of coastal bluffs and the Pacific Ocean. Under the Scenic Highways Element of the county's General Plan, there are two visual elements within view of the project site that are considered scenic resources, including small rural communities and natural wildlife and wildlife habitats.

The highway is bordered by rural residential housing, light industrial land use, hospitality services, campgrounds, and a religious service. The project is in close proximity to MacKerricher State Park, which is west and southwest of the highway. The landscape is a mix of ruderal vegetation, mature tree stands, and ornamental planting, with relatively flat topography. There are parking facilities and gravel pullouts within the corridor viewshed. Drainage ditches, various types of rural fences, overhead utilities, trees, and vegetation immediately border the highway. Drainage ditches and trees are predominantly located to the east.

Local communities along the county's coastline have a strong and vibrant artisan culture. As a result, much of the retail along the coast can be described as cottage industry and/or tourist serving. State Route 1 serves as an essential life-line for residents of the Mendocino Coast, and is considered a Main Street for many of the communities and is the only north-south travel corridor on the coast, such as in Cleone. State Route 1 is a popular choice for tourists using both motorized and non-motorized means of travel. State Route 1 is legislatively designated as part of the Pacific Coast Bike Route (PCBR), which is internationally known and traveled extensively in the summer months by cyclists from multiple countries. The California Coastal Trail (CCT) follows sections of SR 1 within the county. The CCT runs west and outside of the viewshed of the highway within the project limits.

Discussion of CEQA Environmental Checklist Question 2.1 c)—Aesthetics

c) Would the project, 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 a 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?

Visual Resources and Resource Change

Visual resources of the project setting are defined and identified below by assessing visual character and visual quality in the project corridor. Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed project.

Visual Character

Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator. Visual character attributes can include form, line, color, texture, dominance, scale, and continuity, and are used to describe, not evaluate; these attributes are neither considered good nor bad.

The visual character of the project site would be altered by the proposed project but would still be somewhat compatible with the existing visual character of the corridor. The change between the existing visual character and the proposed project's visual character would be positive very low. The project limit is largely defined by a rural community character. The roadway is closely bordered by rural fencing, trees, and utilities, which emphasizes the linearity of the highway and visually appears channelized. There are various fence types visible throughout the project corridor, including different materials and styles, and are generally white or brown in color. Vegetation along the highway also varies in form and type, such as formal and informal styles, and small and large forms. The visual landscape is characterized by trees and vegetation, buildings and highway features. The varying styles of fencing and vegetation increase the level of visual diversity within the landscape. Building styles and architecture are relatively consistent and include a range of neutral colors. There is a varying level of upkeep between residential frontages that adds to the rural character of the community.

Visual character would be altered by the installation of wider shoulders and tree removal. Shoulder widening would increase the dominance of the highway within the landscape; however, the proposed shoulder width is still narrow and consistent with highway sections within the region and is not expected to result in high visual change. Utilities would be permanently relocated due to widening work. As a result, trees would be removed and/or limbed within 15 feet from the centerline of the overhead lines due to utility service policy.

Though exact locations for utility relocation would be determined in future project phases, it is anticipated that all trees would be removed 15 feet back from the edge of cut and fill. There is a potential for a larger mature tree stand to be removed east of the highway, and smaller tree clusters to the west that could be impacted, primarily from the middle of the project northward. Tree removal within the project limits would lead to more open views of and from adjacent private properties, as well as decrease the number of large visual forms along the highway and canopy cover. Overall, the rural character of the project corridor would still be maintained; however, the highway would have a higher level of dominance in the landscape than existing conditions and less unique character attributes would be present due to the potential for mature tree removal.

Visual Quality

Visual quality is evaluated by identifying the vividness, intactness, and unity present in the project before and after project implementation and measuring average change. The visual quality of the project site would be altered by the proposed project. The change between the existing visual quality and the proposed is negative low.

Vividness is the extent to which the landscape is memorable and is associated with distinctive, contrasting, and diverse visual elements. The existing condition of the project corridor has moderate vividness. The area does not have a unique character or quality when compared to other rural coastal communities within the county; however, communities are spaced out and can be infrequent along SR 1, so communities in general tend to have some level of associated memorability. It is anticipated that tree removal due to utility relocation would lead to a decrease in vividness as trees would be further set back from the highway and have a less visually unique quality. Shoulder widening would not lead to a decrease in vividness.

Intactness is the integrity of visual features in the landscape and the extent to which the existing landscape is free from non-typical visual intrusions. The existing condition of the project corridor has moderate to moderate-high intactness. The area primarily consists of rural residential landscapes and is largely free from non-typical visual intrusions. Due to the removal of trees and vegetation, there would be more views of adjacent private properties that are currently semi-screened from the highway. Currently, utilities have a higher contrast with the surrounding environment in more open areas and a low to minimal contrast in areas that are tree lined. It is anticipated that utilities would be visually more noticeable in the landscape due to tree setbacks and introduction of more open areas, which would result in a decrease in intactness. Shoulders would be widened such that the highway would shift easterly, which would result in some property owners being closer to the highway. This would reduce intactness for those property owners.

Unity is the extent to which all visual elements combine to form a coherent, harmonious visual pattern. The existing condition of the project corridor has moderate-high unity. The highway is narrow with predominantly channelized views of rural buildings, fences, trees and vegetation, and overhead utilities. The proposed project would not greatly alter these features; however, the potential removal of a row of large mature trees east of the highway would slightly decrease the overall unity of the corridor due to their linearity and prominence. There would be less visual continuity of the roadside within the community. As there are no proposed design features that would highly contrast with the existing visual environment, the proposed work would still be visually consistent within the corridor, and overall change to unity would be low.

Resource Change

Vividness, intactness and unity would be altered, and the overall visual quality would be negative low. Visual character attributes would be somewhat altered, and the overall visual character would have a positive very low change. Visual changes caused by the project would be somewhat compatible with the existing visual character of the corridor and would not greatly alter the visual quality. Subsequently, resource change (changes to visual resources as measured by changes in visual character and visual quality) for the project would be negative very low to low.

Viewers and Viewer Response

The population affected by the project consists of viewers. Viewers are people whose views of the landscape may be altered by the proposed project—either because the landscape itself has changed or their perception of the landscape has changed. Viewers, or more specifically the response viewers have to changes in their visual environment, is the second variable that determines the extent of visual impacts that would be caused by the construction and operation of the proposed project.

There are two major types of viewer groups for highway projects: highway neighbors (people with views to the road) and highway travelers (people with views from the road). Each viewer group has their own particular level of viewer exposure and viewer sensitivity, resulting in distinct and predictable visual concerns for each group which help to predict their responses to visual changes.

Highway Neighbors

It is anticipated that the average viewer response for highway neighbors to the shoulder widening project would be moderate-high to high. Neighbors include several residences east and west of the highway, Watkins Sand and Gravel, campgrounds, the Asamblea Apostolica De La Fe, Ricochet Ridge Ranch, and hospitality services such as Cleone Grocery, Cleone Gardens Inn, and the Purple Rose Restaurant. Businesses are concentrated at the southern end of the project corridor, while residences are along the entire length. Neighbors would have views of shoulder widening, tree and vegetation disturbance, as well as areas of potential utility relocation. On average, neighbors would have moderate to moderate-high exposure to the changes due to close to moderate-close proximity to the proposed work, fewer numbers of viewers, and long duration of viewing time to the project area. It is anticipated that neighbors would have an overall high level of sensitivity to any visual changes in the environment due to the scenic nature of the Mendocino County coastline. Residences would have the highest level of awareness, unique activity, and local values due to their more permanent occupation, while it is anticipated that on average businesses and other neighbors would have moderate-high to high levels of awareness, activity, and local values due to their type of work, and non-permanent residency.

Highway Travelers

It is anticipated that the average viewer response for highway travelers within the shoulder widening project location would be moderate to moderate-high. Highway travelers include local traffic, commercial trucks, tourists, touring bicyclists, and pedestrians. Travelers would have views of all proposed work. On average, travelers would have low-moderate to moderate exposure to the changes. Locals and tourists have the highest number of viewers associated with this project. Travelers, though close to the project features, have a short duration of exposure since they are moving through the site and the project corridor is short. Tourists typically experience scenic resources within the project area as a cumulative sequence of views rather than as individual specific features, whereas locals would be more aware of specific changes since they travel the corridor regularly. As such, based on the visual changes that would occur as part of this project, local traffic would have a higher viewer response than other highway travelers. It is believed that pedestrians would have a similar viewer response as local traffic, and touring cyclists would have a similar response as tourists. Commercial truck drivers would have a general sense of awareness of visual resources, but less sensitivity to specific changes, leading to a lower viewer response. Therefore, on average, it is anticipated that viewer sensitivity for travelers would be moderate-high.

Summary

The average viewer response for highway neighbors is considered moderate-high to high due to the high level of sensitivity to changes in the visual environment and moderate to moderate-high level of exposure to project features. The average viewer response for highway travelers is considered moderate to moderate-high. This is due to the moderate-high level of sensitivity, and low-moderate to moderate level of exposure. There are more travelers than there are neighbors, but neighbors are stationary and would have more long-term impacts. It is anticipated that the average response of all viewer groups to the Cleone Shoulder Widening project would be moderate to moderate-high.

Visual Impacts

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. Visual resources within the project corridor may include unique views, views identified as important by the public and/or local plans, or views from Officially Designated or Eligible Scenic Highways. Evaluating the resource change includes comparing the existing visual character and visual quality of the project corridor with the

proposed project. Viewer response is based on the exposure and sensitivity that people with views of or from the project corridor would have. Viewer exposure and viewer sensitivity is based on how viewers relate to the existing conditions of the project corridor and how they would respond to visual changes to the surrounding environment. Visual impacts would include temporary impacts, such as those related to construction, as well as the result of the finished project and its aesthetic elements.

Temporary Visual Impacts

The project would have the following temporary visual impacts:

1. If any night work is required, night lighting would have temporary visual impacts on all neighbors.

2. Disturbed soil and existing vegetation would be removed near the work area for construction and utility work. Proposed vegetation to be removed would include roadside vegetation such as grasses and shrubs. It is not anticipated that ornamental planting on private property would be impacted. This temporary impact would be visible for all viewers and would contribute to temporary negative visual impacts until revegetation matures.

3. During construction, neighbors and travelers would have views of heavy construction equipment, traffic control devices, and material related to roadway and structures construction. Because of construction work, traveling speeds would be reduced, which would result in greater exposure to visual impacts for highway users. Temporary visual impacts due to construction would primarily be caused by large equipment and temporary structures for the duration of construction. These temporary visual impacts would be part of the general construction landscape.

Permanent Visual Impacts

Construction could potentially cause permanent visual impacts:

1. Shoulder widening could result in low to low-moderate visual impacts. Shoulders would be widened from 0-1 foot to 4 feet. The increased width of the highway would somewhat alter the visual character but would still maintain compatibility with, and not degrade the quality of, the corridor. Although the highway would have a larger scale than existing conditions, the features are not visually out of character when compared to the rural community character, as well as the rest of SR 1. Widening

work would be the most visually apparent for highway users; however, highway neighbors to the east would now be closer to the highway as the roadway would be widened eastward. This would somewhat decrease the visual quality for neighbors on SR 1 located along the northbound lane just east of Ward Avenue, where the edge of pavement would be closer to their property fence. For all other areas, buildings are set back far enough from the highway, or there is existing vegetation (that would not be removed) that would continue to act as a screen to and from the highway.

2. Tree removal and limbing due to utility relocation work would result in low-moderate visual impacts. The potential removal of large mature tree stands that border the northeastern end of the project corridor could decrease the visual quality and character of the project area, but would still be compatible with the visual character of the highway. There would be no newly introduced visual character attributes as a result of tree removal for both highway neighbors and highway users. Where there is potential for tree removal, there are either existing views to and from the highway or trees and vegetation beyond the removal area which would maintain a visual screen. Limbing work would lead to low visual impacts as tree character would be altered and cuts would be visible to viewers.

3. Newly relocated utilities could lead to low visual impacts. The project corridor has existing overhead utilities. The project does not propose the installation of additional utilities, and it is anticipated that new utility locations would be near existing locations. Overhead utilities would be visually more apparent in areas that become more open due to tree removal.

4. Drainage work would lead to visual changes; however, it is not anticipated that there would be associated negative visual impacts. Visible drainage work areas include removing graded unlined ditches and incorporating vegetated swales. Both changes would be well integrated with the visual corridor.

5. Hot mix asphalt overlay and new pavement delineation would not lead to negative visual impacts. The pavement and striping would be in new condition and improve the visual quality of the roadway.

While the project would somewhat degrade the existing visual character and quality of the site and its surroundings, it would not create a new source of substantial light and glare, would not have a high negative effect on a scenic vista nor damage scenic resources. Visual resources in the project corridor include rural community and upland forest. The primary

changes to visual resources would include shoulder widening and tree removal. Resource change would be negative very low to low. The average viewer response within the project corridor would be moderate to moderate-high. This would include both highway neighbor and highway traveler responses within the project site. There are more travelers than neighbors, and travelers have a lower viewer response. Subsequently, overall, the proposed project at this location would have negative low-moderate visual impacts.

Measures have been identified which could lessen visual impacts caused by the project. Also, the inclusion of aesthetic features in the project design could help generate public acceptance of the project. This section describes additional measures to address specific visual impacts. These would be designed and implemented with concurrence of the District Landscape Architect.

To further reduce visual impacts caused by the project, the following measures would be incorporated:

1. Maintain existing natural grade wherever practical.

2. Prune trees and vegetation so they have visually balanced forms and the branch cuts are not highly visible.

3. If tree removal is required outside of the existing Caltrans right of way, the property owners would be consulted for potential replacement planting measures.

Given this, a "Less Than Significant Impact" determination was made for CEQA Environmental Checklist Question 2.1 c).

Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.2. Agriculture and Forest 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 (CALFIRE) regarding the state's inventory of forest land, including the Forest and Range Assessment Project; the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	N/A	N/A	N/A	✓
Would the project: b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	N/A	N/A	N/A	✓
Would the project: c) Conflict with existing zoning or cause rezoning of forest land (as defined by 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))?	N/A	N/A	N/A	✓
Would the project: d) Result in the loss of forest land or conversion of forest land to non-forest use?	N/A	N/A	N/A	✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. There is no agricultural land within or adjacent to the project area, and the scope of work would not conflict with any zoning, nor result in the loss or conversion of agriculture and/or forest resources.

2.3. Air Quality

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

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Conflict with or obstruct implementation of the applicable air quality plan?	N/A	N/A	N/A	✓
Would the project: b) 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?	N/A	N/A	N/A	✓
Would the project: c) Expose sensitive receptors to substantial pollutant concentrations?	N/A	N/A	N/A	✓
Would the project: d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Air Quality Memorandum dated June 26, 2020, (Caltrans 2020b). Potential impacts to this resource are not anticipated because the proposed project would not increase traffic volume, fleet mix, and/or speed.

2.4. Biological Resources

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	N/A	N/A	✓	N/A
Would the project: b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	N/A	N/A	✓	N/A
Would the project: c) 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?	N/A	✓	N/A	N/A
Would the project: d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	N/A	N/A	N/A	✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	N/A	N/A	N/A	✓
Would the project: f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	N/A	N/A	N/A	✓

A "No Impact" determination was made for Questions d), e), and f) in this section based on the scope, description, and location of the proposed project, as well as the Natural Environment Study (NES) dated June 30, 2020 (Caltrans 2020c). See below for further discussion of the "Less Than Significant Impact" determinations made for Questions a) and b), and "Less Than Significant Impact with Mitigation" determination made for Question c).

Regulatory Setting

Within this section of the document (Section 2.4—Biological Resources), the topics are separated into Natural Communities, Wetlands and Other Waters, Plant Species, Animal/Threatened and Endangered Species, and Invasive Species. Plant and animal species listed as "threatened" or "endangered" are covered within the Animal/Threatened and Endangered sections. Other special status plant and animal species, including CDFW fully protected species, species of special concern, USFWS and NMFS candidate species, and California Native Plant Society (CNPS) rare and endangered plants are covered in the Plant and Animal sections.

Sensitive Natural Communities

The California Department of Fish and Wildlife (CDFW) maintains records of sensitive natural communities (SNC) in the California Natural Diversity Database (CNDDB). Sensitive natural communities are those natural communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. These communities may or may not contain special status taxa or their habitat.

Wetlands and Other Waters

"Waters" of the United States (including wetlands) and State are protected under several laws and regulations. The primary laws and regulations governing wetlands and other waters include:

- Federal Clean Water Act (CWA), 33 United States Code (USC) 1344
- Federal Executive Order for the Protection of Wetlands (EO 11990)
- State Sections 1600–1607 of the California Fish and Game Code (CFGC)
- State Porter-Cologne Water Quality Control Act, Section 3000 et seq.

Plant Species

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special status plant species. The primary laws governing plant species include:

- Federal Endangered Species Act (FESA), USC 16, Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402
- California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq.
- Native Plant Protection Act, California Fish and Game Code, Sections 1900–1913
- National Environmental Policy Act (NEPA), 40 CFR, Sections 1500–1508
- California Environmental Quality Act (CEQA), California Public Resources Code (PRC), Sections 21000–2117

Animal/Threatened and Endangered Species

The USFWS, National Marine Fisheries Service (NMFS), and CDFW have regulatory responsibility for the protection of special status animal species. The primary laws governing animal species include:

- NEPA, 40 CFR Sections 1500–1508
- CEQA, California PRC, Sections 21000–2117
- Migratory Bird Treaty Act, 16 USC Sections 703–712
- Fish and Wildlife Coordination Act, 16 USC Section 661
- Sections 1600–1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

The primary laws governing threatened and endangered species include:

- FESA, USC 16, Section 1531, et seq. See also 50 CFR Part 402
- CESA, California Fish and Game Code, Section 2050, et seq.
- CEQA, California PRC, Sections 21000–21177
- Magnuson-Stevens Fishery Conservation and Management Act, 16 USC, Section 1801

Migratory Birds

The Federal Migratory Bird Treaty Act (MBTA) (15 USC 703-711), Title 50 Code of Federal Regulations (CFR) Part 21 and 50 CFR Part 10, and the CFGC Sections 3503, 3513, and 3800, protect migratory birds, their occupied nests, and their eggs from disturbance or destruction. The MBTA provides protection in part by restricting the disturbance of nests during the bird nesting season. Invasive Species

The primary laws governing invasive species are Executive Order (EO) 13112 and NEPA.

Environmental Setting

The project's Environmental Study Limits (ESL) is the area where construction work is anticipated to occur. The ESL is in the southern limits of Cleone and approximately 2.94 acres. The Biological Study Area (BSA), which comprises the project ESL with an added 100-foot buffer, is approximately 13.31 acres. The limits of the ESAL and BSA include developed and undeveloped areas along SR 1 in Cleone. Developed areas include highway roadside pullouts, private driveways and roads, a convenience store, as well as private rural residences with ornamental landscaping for purposes of windbreaks. Undeveloped areas include Bishop pine and mixed conifer forest, wax myrtle scrub, red alder forest near coastal wetlands and waters, nonnative brambles, and open nonnative grasslands.

Sensitive Natural Communities

Sensitive natural communities (SNCs) are natural communities that are of limited distribution statewide or within a county or region and are often vulnerable to human-related environmental impacts. These communities may or may not contain special status taxa or their habitat. High priority SNCs are globally (G) and state (S) ranked 1 to 3, where 1 is critically imperiled, 2 is imperiled, and 3 is vulnerable. Global and state ranks of 4 and 5 are considered apparently secure and demonstrably secure, respectively (CDFW 2019).

Based on the CDFW's Vegetation Classification and Mapping Program's (VegCamp) list of SNCs (CDFW 2019), two SNCs were observed within the ESL and BSA with the following alliances and associations:

- Bishop Pine Forest (*Pinus muricata* Forest Alliance) (G3?/S3?): *Pinus muricata* Association, *Pinus muricata / Notholithocarpus densiflorus* Association; and
- Wax Myrtle Scrub (*Morella californica* Shrubland Alliance) (G3/S3): *Morella californica / Polystichum munitum* Association.

Bishop Pine Forest Alliance

Bishop pine (*Pinus muricata*) occurs in coastal conifer and hardwood forests, chaparral, and annual grasslands from southwest Oregon to Santa Barbara County. It grows in various soils including acidic, serpentine, sandy, loamy, and clay and at elevations from sea level to 1,320 feet (Vogl et al., 1977). In northwest coastal California, Bishop pine can be found from Humboldt County south to Sonoma County in maritime terraces, coastline slopes, and coastal bluffs. The climate in this coastal band is dominated by summer fog, which is likely an important moisture source during the dry summer months or drought. The fog also serves to

moderate air temperatures and reduce movement of water and evaporation through aerial parts of the plant (i.e., transpiration) (Holland 1986). Bishop pine is typically dominant or co-dominant in the tree canopy with Monterey cypress, Bolander pine, grand fir, coast redwood, Mendocino pygmy cypress, Monterey pine, Pacific madrone, and Gowen cypress.

Bishop pine reaches maturity relatively quickly and begins cone and seed production at 5 to 6 years of age. It can grow up to 50 feet tall and has a lifespan of 80 to 100 years. Intense heat is required to open the closed cones, which then disperse seeds. Stands are usually uniformly aged as they originate after intense stand-replacing fires (Vogl et al., 1977).

The Bishop Pine Forest Alliance is considered a SNC in California according to the California Department of Fish and Wildlife (CDFW 2019). The Bishop Pine Forest Alliance has a provisional global and state ranking of G3?S3?. Declines in Bishop pine forest, particularly in Mendocino and Sonoma counties, is primarily a result of housing development (Giusti 2014). Other threats to this community include diseases such as pitch pine canker, competition from introduced species such as Monterey pine that facilitate establishment of pathogens fatal to bishop pine, and fire suppression.

Wax Myrtle Scrub Shrubland Alliance

Wax myrtle scrub (*Morella californica*) is a native shrub in the *Myracaceae* (Myrtle) family found primarily along the coast in northern and central California, although it does occur as far south as Los Angeles County and as far north as British Columbia. It is moderately fast growing and long-lived. It grows in an upright form to a height of 33 feet (11 meters), with active growth during the spring and summer (USDA-NRCS 2002). Individuals have low tolerance to cold and drought, but are fire resistant. This community is present in moist or wet soils with moderately coarse sandy loams and high water tables and in habitats such as brackish and freshwater lagoons, small seeps, streams, and coastal dunes and bluffs in elevations from sea level to 980 feet (300 m) (Sawyer et al., 2009). This shrubland alliance is globally and state ranked as vulnerable (G3/S3). Wax myrtle scrub SNC is dominated by wax myrtle (over 50% cover) and typically includes sitka spruce, coast pine, coyote brush, coastal silk tassle, ocean spray, gooseberry, California blackberry, California manroot, and evergreen huckleberry (Sawyer et al., 2009). Shrubs in this community are less than 32 feet (10 meters) tall and the shrub canopy is intermittent to continuous. The herbaceous layer, or understory, is sparse, and the tree canopy is present at low cover.

Wetlands and Other Waters

State Route 1, and its surrounding area within the ESL and BSA, possesses hydrogeological and climate conditions that result in various aquatic features and associated vegetation. Many of these features are recognized as potentially jurisdictional by the U.S. and the State Wetland delineations conducted for the project indicate the ESL and BSA have several potentially jurisdictional water features, including palustrine (freshwater) wetlands, roadside drainage ditches, and a perennial stream (Figures 3 and 4).

Dimensions of these potentially jurisdictional features are summarized below in Table 3.

Table 3. Potentially Jurisdictional Waters of the U.S. and Coastal Wetland Features within the Environment Study Limits and Biological Study Area

Feature Name	Post Miles (PMs)	Type of Feature	Linear Feet	Acreage within ESL	Acreage within BSA
CW-1	65.30	Coastal palustrine wetland	N/A	0.008	0.089
CW-2	65.20	Coastal palustrine wetland	N/A	0	0.005
CW-3	65.49	Coastal palustrine wetland	N/A	0	0.281
			TOTAL	**0.008**	**0.375**
OW-1	65.40	Intermittent drainage	534	0.036	0.036
OW-2	65.30	Intermittent drainage	166	0.001	0.007
OW-3	65.40	Intermittent drainage	208	0.001	0.005
OW-4	65.40	Intermittent drainage	51	0	0.001
OW-5	65.49	Intermittent drainage	122	0	0.002
OW-6	65.26	Intermittent drainage	84	0	0.002
OW-7	65.26	Intermittent drainage	84	0	0.004
			TOTAL	**0.038**	**0.057**
PW-1	65.30	Palustrine wetland	N/A	0.014	0.030
PW-2	65.16	Palustrine wetland	N/A	0	0.009
			TOTAL	**0.014**	**0.039**
RPW-1	65.16	Perennial drainage	153	0.002	0.015
			TOTAL	**0.002**	**0.015**
			TOTAL (ALL FEATURES)	**0.062**	**0.486**

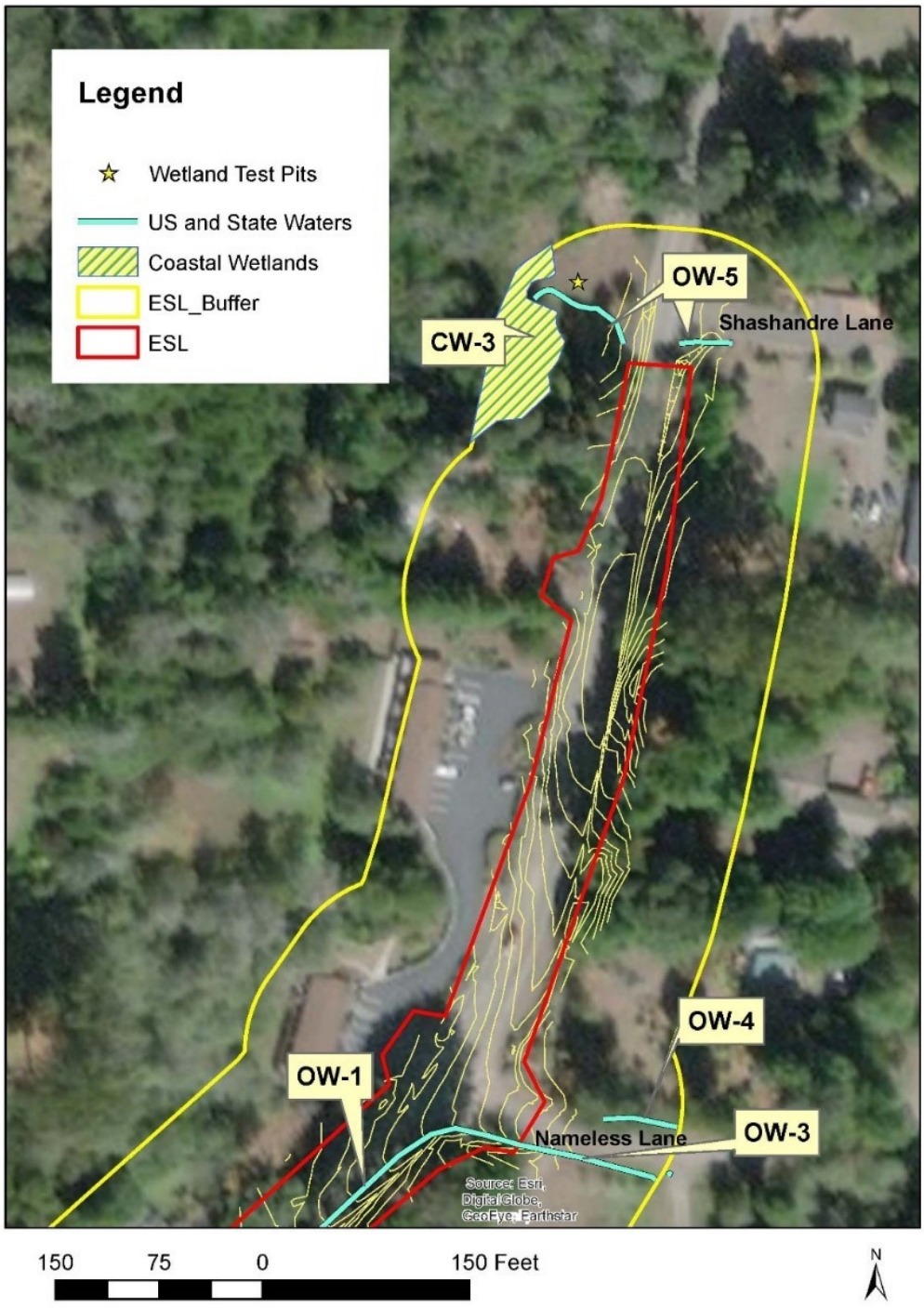


Figure 3. Potentially Jurisdictional Water Features within the Project Environmental Study Limits and Biological Study Area

—North of Nameless Lane

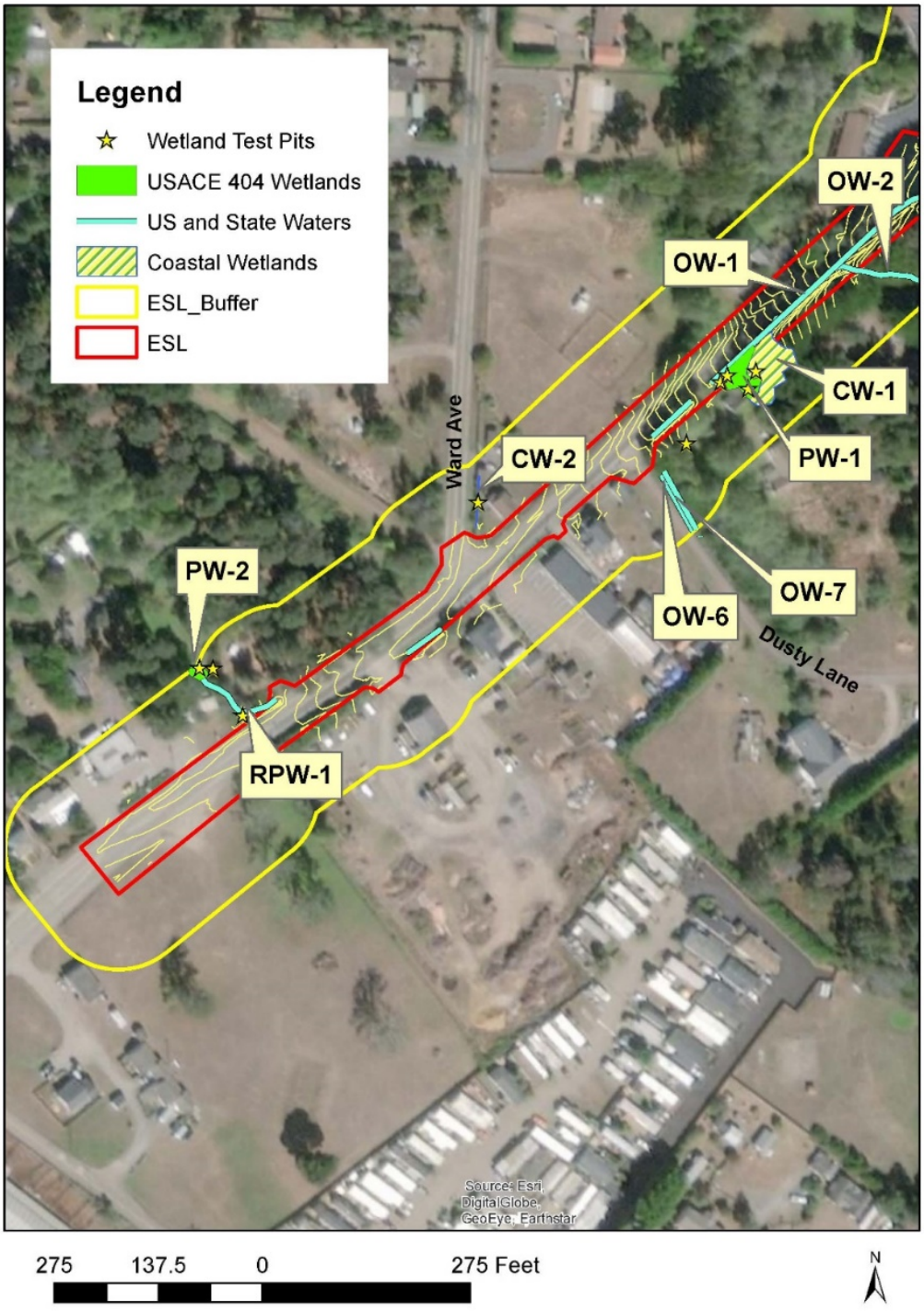


Figure 4. Potentially Jurisdictional Water Features within the Project Environmental Study Limits and Biological Study Area

—South of Nameless Lane

Three-Parameter Wetlands

Two three-parameter palustrine (freshwater) wetlands within the BSA have persistent emergent vegetation and are seasonally flooded (PEM1C). The first is PW-1, a wetland at PM 65.30 within the ESL adjacent to the northbound lane of SR 1 on the east side of the highway (Figure 4). Approximately 0.014 acre is within the ESL and 0.030 acre is present within the BSA. The dominant species in this wetland are slough sedge, soft rush, and small-fruited bulrush. A minimal amount of tree canopy cover is present with a single red alder completely within the wetland, as well as bordering trees such as Bishop pine. This wetland is adjacent to a garage structure and appears to be saturated from a leaky pump next to the garage, as well as the naturally high groundwater table.

The second three-parameter wetland, PW-2, represents approximately 0.009 acre of the BSA at the far southwestern edge (Figure 4) along the perennial unnamed stream. This wetland is dominated by common creeping buttercup, water parsely, and watercress.

Coastal Wetlands

Three coastal wetlands (CW) within the BSA are considered potentially jurisdictional under the CCA; these are palustrine, have persistent emergent vegetation, and are seasonally flooded (PEM1C). One of these wetlands, CW-1, is within the ESL and is adjacent to the northeast of PW-1 (Figure 4). Approximately 0.008 acre is within the ESL and 0.089 acre is within the BSA. CW-1 appears to be a transition zone between PW-1 and upland terrain farther northeast. Dominant species include slough sedge, soft rush, and tall coast plantain. The second coastal wetland, CW-2, is a vegetated drainage ditch along the east side of Ward Avenue north of the ESL (Figure 4). Approximately 0.005 acre is present within the BSA. Dominant species include common yellow-eyed grass, creeping buttercup, soft rush, and tall coast plaintain. The third coastal wetland, CW-3, is part of the larger forested/shrub (PSS1C) historic wetland to the far northwest of the ESL (Figure 3). Approximately 0.281 acre is present within the BSA. This area overlaps the Wax Myrtle Scrub SNC.

Other Waters of the U.S. and State

The feature classified as RPW-1 represents approximately 0.002 acre of an unnamed perennial stream within the ESL and 0.015 acre within the BSA (Figure 4). This feature is classified as Riverine, Permanent, Unconsolidated Bottom (R3UB4) (Cowardin et al., 1979). It is located at approximately PM 65.16 at the culvert outlet, immediately west of the ESL along the southbound side of SR 1. It then continues about 50 feet southwest, turns sharply to the northwest and gently curves farther north at the 100-foot survey buffer limit. From

there, it flows northwest towards an outlet at the mouth of the Pacific Ocean. The habitat at the culvert outlet at the beginning of the daylighted creek contains thick, overgrown shrub canopy dominated by Himalayan blackberry brambles and Douglas' spiraea. As it flows towards the ocean and about 50 feet downstream, the vegetation changes to willow, blackberry, elderberry, and red alder. The ordinary high water mark (OHWM) is approximately 1 foot high from the channel bed, and the width from edge of OHWM bank to bank is approximately 4 feet. The substrate is relatively muddy with very little cobble or gravel. The water has leaf litter resting on the channel bed and on the water surface. The stream is perennial and characteristically 6 inches deep. RPW-1 receives water flow from upstream culverted ditches parallel to SR 1. Other culverted waters, created by local residents to the east and northeast of the project ESL, contribute flow to RPW-1 during the rainy season when stormwater runoff is highest.

Three of the eight Other Waters of the U.S. and State (OWs) occur within the ESL—features OW-1, OW-2, and OW-3 (Figures 3 and 4). These OWs within the ESL are intermittent drainages, meaning the area below the OHWM is either seasonally flooded or seasonally flooded/saturated. These three intermittent drainages with an unconsolidated bottom surface (Cowardin code R4UB4) total 0.038 acre within the ESL and 0.048 acre within the BSA. They are relatively narrow and convey ground water and stormwater runoff from the east towards the southwest, eventually terminating at the culvert outlet where the culvert crosses the highway at PM 65.16.

The intermittently-flowing roadside drainage, OW-1, parallel and immediately adjacent to the east of the northbound lane of SR 1, begins where it daylights immediately south of the intersection of SR 1 with Nameless Lane (Figures 3 and 4). This is the longest drainage ditch in the ESL. The daylighted sections of OW-1 comprise 0.036 acre in the ESL and also 0.036 in the BSA. The OHWM is approximately 3 feet wide from the northernmost point to the southernmost location. The substrate is sandy, loamy soil and adjacent ruderal herbaceous vegetation consists largely of vernal sweet grass, tall flatsedge, tall coast plantain, and ripgut brome. The ditch begins at a somewhat shallow 10-15% slope, then soon becomes deeply incised at approximately 60-80% slope for the remainder of the daylighted sections.

Intermittent drainage OW-2 flows directly into OW-1 approximately 200 feet south of the intersection of SR 1 with Nameless Lane (Figure 4). Approximately 0.001 acre is represented within the ESL and 0.007 acre within the BSA.

OW-2 begins as a shallow depression (i.e., less than 10% slope) with a OHWM width of 2 feet in a ruderal field and, after passing through a narrow culvert approximately 15 feet upslope of OW-1, becomes much more incised to approximately 30-50% slope and a narrower OHWM of approximately 1 foot. This section flows southwest into OW-1. Bank vegetation comprises small-fruited bulrush, Kentucky bluegrass, and rattlesnake grass.

Intermittent drainages OW-3 and OW-4 flow directly into OW-1 and are located parallel to Nameless Lane on the south and north sides of the street, respectively (Figures 3 and 4). Approximately 0.001 acre of OW-3 is present within the ESL and 0.005 acre within the BSA. OW-4 is only present within the BSA, comprising 0.001 acre. The OHWM for these drainages ranges from 1.25 to 2 feet. The slope ranges from 15-30% and the height ranges between 2 feet to 2 feet 10 inches. Vegetation above the OHWM is herbaceous and mostly comprises vernal sweet grass and rattlesnake grass.

Intermittent drainages OW-5, OW-6, and OW-7 are outside of the ESL, but drain eventually to OW-1 (Figures 3 and 4). OW-5 is the northernmost drainage ditch within the BSA, approximately 10 feet south of the intersection of SR 1 with Shashandre Lane, and represents 0.002 acre. This feature begins approximately 36 feet east of SR 1 with a 2.5-foot-wide OHWM and 1-foot-deep box-shaped channel, which flows through two culverts, one directing water south along SR 1 and another crossing underground connecting to the west side of SR 1. The water flowing through the cross culvert beneath SR 1 outlets into ruderal habitat, and continues approximately 86 feet west towards CW-3 (0.001 acre on each side of SR 1). The feature on the west side of SR 1 is on private land and has been dug and created by private landowners to funnel the water away from the open field towards CW-3.

The ditch OHWM is only 8 inches wide on the west side of SR 1 and terminates in a 4-foot-diameter, 1-foot-deep “pond” that was dug out to retain stormwater. Common surrounding vegetation consists of vernal sweet grass, creeping buttercup, yellow-eyed grass, and common oxeye daisy. Features OW-6 and OW-7 are paired drainage ditches separated by less than 1 foot immediately north of Dusty Lane. These two ditches have origins far beyond the 100-foot BSA survey boundary and join immediately before entering a single culvert approximately 10 feet east of the ESL, southeast of the northbound lane of SR 1 (Figure 4). They flow directly into OW-1 through this culvert. OW-6 and OW-7 comprise 0.002 and 0.004 acre within the BSA, respectively. OW-6 has a OHWM width of approximately 1 foot and the depth from top of bank to channel ranges from 2 to 12 inches. The slope is relatively gentle, ranging from 10-30%. OW-7 is slightly upslope of OW-6 and has a OHWM width of approximately 2 feet and a depth of 1 foot. The slope is similar to OW-6.

Vegetation at these two drainages includes a varied canopy layer, with a tree and shrub layer, and an understory. The tree and shrub layer comprises up to 55% of the area and includes red alder, coast redwood, wax myrtle, Himalayan blackberry, and California blackberry. The herbaceous layer is dominated by creeping buttercup, tall coast plantain, and vernal sweet grass.

Plant Species

The California Native Plant Society (CNPS) inventory (CNPS 2020), California Natural Diversity Database (CNDDB) (CDFW 2020), and USFWS Information for Planning and Conservation (IPaC) (USFWS 2020) species lists indicate several rare plants could potentially occur within the project region. Seasonally-appropriate floristic surveys were completed in April 2019 to determine if species were present or absent from the project area (Appendix E-Botanical Survey Results). Only one rare plant, Point Reyes ceanothus, was detected within the BSA, but not in the ESL.

Discussion of Point Reyes Ceanothus

Point Reyes ceanothus (*Ceanothus gloriosus* var. *gloriosus*) is a dicot and shrub in the buckthorn family (*Rhamnaceae*) that has a California Rare Plant Rank of 4.3, indicating the species has limited distribution throughout a broader region in California. It is endemic to California from Mendocino County south to Monterey County along the coast. This species is most commonly found in sandy soils in coastal bluff, scrub, dunes and also in closed cone coniferous forests (Calflora 2020). Point Reyes ceanothus is a perennial shrub that grows 2-3 feet tall, about 6 feet wide in a low, spreading or mounding habit. The leaves are opposite, thick, elliptical, and 2-5 cm long. They are dark green year round, and the margins are heavily toothed. The clustered bluish purple flowers are typically found blooming from March through May. An approximately 0.01 acre patch of Point Reyes ceanothus was observed in a landscaped area of the parking lot of Cleone Inn adjacent to the ESL at approximately PM 65.35.

Animal/Threatened and Endangered Species

Animals are considered to be of special concern based on: (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special status animals occurring on site. The species discussed below appeared in USFWS, NMFS, and CDFW queries for the proposed project.

Discussion of Northern Red-legged Frog

The Northern red-legged frog (NRLF) (*Rana aurora*) is a state species of special concern (SSC) that occurs along the California Coast Ranges from Del Norte County to Mendocino County, usually below 3,936 feet (1,200 meters). Northern red-legged frog use ephemeral, intermittent, and perennial creeks and streams, reservoirs, springs, wetlands, and man-made impoundments as breeding habitat and aquatic non-breeding habitat (California Herps 2020). Upland dispersal habitats are primarily utilized by NRLF in dispersal events, which can be triggered by both periods of wet weather and dry weather when breeding pools and other occupied aquatic habitats dry up and are no longer suitable (California Herps 2020). Northern red-legged frog likely requires rain for dispersal as individuals have been found considerable distances from breeding sites on rainy nights. Northern red-legged frog is highly aquatic and prefers shorelines with extensive vegetation. It uses deep-water habitat (three feet or more) at the bottom of pools to escape predation. Northern red-legged frog breed from January to July and require permanent or nearly permanent pools for larval development, which takes 11 to 20 weeks. Intermittent streams must retain surface water in pools year-round for frog survival (California Herps 2020).

Discussion of White-tailed Kite

The white-tailed kite (*Elanus leucurus*) was listed as a fully protected (FP) species in 1957 in California (CFGC Section 3511). This species can be found in the Central Valley and entire California coast in a variety of habitats. It nests in dense, relatively large stands of riparian, redwood, and Douglas-fir trees. Kites build platform nests in dense canopies at the tops of nest trees. The nesting season for white-tailed kites in California is generally from late January until August (Dunk 1995).

Discussion of Western Bumble Bee and Obscure Bumble Bee

The Western bumble bee (*Bombus occidentalis occidentalis*) was recently accepted as a candidate species for listing as an endangered species under CESA on June 12, 2019. The Western bumble bee has recently declined in abundance and distribution and is no longer present across much of its historic range (Xerces Society 2012). In California, there are a few occurrences on the northern California coast (Xerces Society 2017). The Western bumble bee lives in annual colonies late February to early November that comprise a queen, workers, and reproductive members. Western bumble bees are found in a wide variety of natural, agricultural, urban, and rural habitats and are generalist foragers, gathering pollen and nectar from a wide variety of flowering plants (Hatfield et al., 2012).

This subspecies prefers meadows and grasslands with abundant floral resources for both foraging and nesting. They nest in underground cavities, such as old animal nests and in open west-southwest slopes bordered by trees.

The obscure bumble bee (*Bombus calignosus*) is a species of bumble bee native to the west coast of the U.S. where its distribution extends from Washington to southern California. It is critically imperiled due to rarity, few populations, and restricted range. Queens of this species emerge from hibernation in late January, the first workers appear in early March, and the males follow by the end of April. Nests are usually well concealed, often underground, sometimes on the surface, and occasionally 30 to 40 feet (9 to 12 meters) above ground in trees (Thorp et al., 1983). The colony dissolves in late October, when all the inhabitants die except the new queens.

Discussion of Bat Species

Several bat species in California either use or are likely to use trees for their habitat needs (Taylor 2006). Bats use these tree cavities for roosting during the day and for bearing and rearing young (i.e., maternal roost) typically from May through August. They may also use trees in winter as hibernacula. At night, bats often roost in the open on the tree bark. Night roosts, which are used from approximately sunset to sunrise, are sites where animals congregate to rest and digest their food between foraging bouts. Night roosts also serve as important stopping points during migration. In the mild northern California coastal climate, bats are present year-round.

In California, nine species of bats are considered state SSC by CDFW and three additional species are proposed for that status. Additionally, the Forest Service and Bureau of Land Management list some species as sensitive and the Western Bat Working Group lists some as high priority for consideration of conservation measures. Under CEQA, state agencies, local governments, and special districts are required to evaluate and disclose impacts to bat species from projects in the state. Section 15380 of the CEQA Guidelines clearly indicates that SSC should be included in an analysis of project impacts. California Fish and Game Code Section 4150 provides further protection to bats from take or possession. Disturbances by humans, especially in hibernacula and maternity roosts, are a serious threat to most of the species.

The project BSA lies within the range of two SSC bats—pallid bat (*Antrozous pallidus*) and Townsend's big-eared bat (*Corynorhinus townsendii*)—in addition to other common bat species such as big brown bat (*Eptesicus fuscus*), little brown bat (*Myotis lucifugus*), silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), Brazilian free-tailed bat (*Tadarida brasiliensis*), Yuma myotis (*Myotis yumanensis*), long-eared myotis (*Myotis evotis*), fringed myotis (*Myotis thysanodes*), long-legged myotis (*Myotis volans*), and California myotis (*Myotis californicus*) (CDFW-CNDDB 2020).

Migratory Birds

The Federal Migratory Bird Treaty Act (MBTA) (15 USC 703-711), Title 50 Code of Federal Regulations (CFR) Part 21 and 50 CFR Part 10, and the CFGC Sections 3503, 3513, and 3800, protect migratory birds, their occupied nests, and their eggs from disturbance or destruction. The MBTA provides protection in part by restricting the disturbance of nests during the bird nesting season.

Invasive Species

California's invasive species list is maintained by the California Invasive Plant Council (Cal-IPC) (Cal-IPC 2020). Of these species, Jubata grass (*Cortaderia jubata*), a highly invasive species that has potential to disturb native ecosystems, was identified within the BSA. Other species observed in the BSA that rank as highly invasive include freeway iceplant, English ivy, and Himalayan blackberry (Appendix E—Botanical Survey Results).

Discussion of CEQA Environmental Checklist Question 2.4 a)—Biological Resources

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or National Oceanic and Atmospheric Administration (NOAA) Fisheries?

Plant Species

Caltrans has determined there would be no adverse effects to the following listed plant species under FESA and/or take of the following species under CESA that appeared in the CNDDB, USFWS, CNPS, and CDFW queries:

- Burke's goldfields
- Contra Costa goldfields
- Howell's spineflower
- Humboldt County milk-vetch
- Menzies' wallflower
- Monterey clover
- Roderick's fritillary
- Showy Indian clover

Discussion of Point Reyes Ceanothus

There are no CNDDB occurrences of Point Reyes ceanothus within the nine quads of the project study area. Calflora (2020) shows the nearest occurrence approximately 0.5 mile from the project at MacKerricher State Park.

An approximately 0.01-acre patch of Point Reyes ceanothus was observed in a landscaped area of the parking lot of Cleone Inn adjacent to the ESL at approximately PM 65.35. Although the patch of Point Reyes ceanothus was observed adjacent to the ESL, Caltrans does not anticipate any impacts to this species due to project activities. Impacts to this species would be avoided through incorporation of standard measures to protect environmentally sensitive areas.

Impacts to Point Reyes ceanothus are not expected as a result of construction activities; therefore, no compensatory mitigation is anticipated. The project is not likely to impact Point Reyes ceanothus and no cumulative impacts are expected.

Given this, it was determined the project would have "No Impact" on Point Reyes ceanothus.

Animals/Threatened and Endangered Species

The following federal and/or state listed or candidate listed species appeared on official species queries for the BSA and the surrounding region. However, Caltrans has determined the project would have "no effect" on federally listed species and their designated critical habitat based on the project location being outside the range of the species or absence of suitable habitat within the BSA. Caltrans anticipates no take of the following listed threatened and endangered species:

- Bald eagle
- Behren's silverspot butterfly
- Blue whale
- California red-legged frog
- Chinook salmon California Coastal Evolutionarily Significant Unit (ESU)
- Coho salmon Central California Coast ESU
- East Pacific DPS green sea turtle
- Fin whale
- Fisher West Coast DPS
- Green sturgeon Southern DPS
- Guadalupe fur seal
- Humpback whale
- Leatherback sea turtle
- Little willow flycatcher
- Lotis blue butterfly
- Marbled murrelet
- North Pacific right whale
- Northern spotted owl
- Olive ridley sea turtle
- Point Arena mountain beaver
- Sei whale
- Short-tailed albatross
- Southern Resident killer whale
- Sperm whale
- Steelhead Northern California DPS
- Tidewater goby
- Western snowy plover
- Western yellow-billed cuckoo

Discussion of Northern Red-legged Frog

Northern red-legged frog is a state species of special concern. No specific surveys were conducted for this species. There are several CNDDB occurrences of the NRLF within two miles of the BSA. The unnamed stream along the southwest border of the campground at PM 65.15 could provide suitable habitat for NRLF; however, no NRLF were observed during field visits. This species may be present in the ESL.

Construction activities, such as culvert replacement at RPW-1, could temporarily restrict movement of NRLF because individuals may avoid using this part of the drainage. Due to the temporary nature of construction and the abundance of suitable habitat in the project vicinity to which frogs could relocate if necessary, the impacts to NRLF from this project would be minimal. Additionally, as a standard measure, if any NRLF are encountered by the biological monitor during construction activities at the unnamed stream feature, the NRLF would be relocated outside the project limits. Given this, no adverse impacts to this species are anticipated. The proposed project would have minimal impact on NRLF with incorporation of standard measures. No additional species-specific avoidance and minimization measures would be implemented. Adverse impacts to NRLF are not anticipated; therefore, no compensatory mitigation would be required and no cumulative impacts are expected.

Given this, it was determined the project would have a "Less Than Significant Impact" to the Northern red-legged frog.

Discussion of White-tailed Kite

White-tailed kite was listed as a fully protected (FP) species in 1957 in California (CFGC Section 3511). No white-tailed kites have been observed within the BSA. The nearest known occurrence of white-tailed kites is approximately 20 miles south of Cleone along the Navarro River. No nests have been observed within the BSA, but the stand of mixed conifer forest along the northwest edge of the ESL provides marginally suitable nesting habitat. White-tailed kites are not likely to nest within the ESL, but the potential for this species to occur cannot be discounted.

Nesting white-tailed kites within the BSA could potentially be impacted by removal of suitable nest trees and visual and noise disturbance associated with construction near an active nest. Noise and visual impacts to this species would not be substantial given the relatively high ambient noise and human activity that currently exists along SR 1 and surrounding grasslands, the temporary nature of the project, and the implementation of

standard measures designed to avoid disturbing active nests. No adverse impacts to white-tailed kite are anticipated with implementation of these measures.

As white-tailed kites are unlikely to be impacted by the proposed work, no species-specific avoidance and minimization measures would be implemented beyond standard measures. These measures include pre-construction surveys for active bird nests in suitable habitat within the BSA and establishing a suitable buffer distance from the nest by a qualified contractor-supplied biologist. If an active nest is found, appropriate conservation measures would be implemented, such as establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, or delaying construction activities near the active nest site until the young have fledged.

As white-tailed kites are unlikely to be impacted by the proposed work, no compensatory mitigation would be required and no cumulative impacts are expected.

Given this, it was determined the project would have "No Impact" on white-tailed kites.

Discussion of Western Bumble Bee and Obscure Bumble Bee

The Western bumble bee was recently accepted as a candidate species for listing as an endangered species under CESA. The obscure bumble bee is critically imperiled due to rarity, few populations, and restricted range. No species-specific surveys were conducted for these bumble bee species. The CNDDB indicated occurrences of Western and obscure bumble bee approximately 2.5 miles south of the ESL in Fort Bragg in 1950. There is potential foraging habitat for Western and obscure bumble bee within the ESL in ruderal grassland and herbaceous cover.

Most ground disturbance for this project would occur in areas routinely disturbed by mowing. The areas planned for paving that contain suitable habitat are unlikely to have nesting colonies of Western or obscure bumble bee due to the routine disturbance and the high groundwater table saturating the soil. Thus, Western and obscure bumble bees are not anticipated to be overwintering in areas within the ESL. Project activities such as staging, culvert replacement, or shoulder widening are not expected to injure or kill foraging bumble bees, and overall foraging habitat within the BSA would remain intact.

As Western and obscure bumble bees are unlikely to be impacted by the proposed work, no species-specific avoidance and minimization measures would be implemented. Since the project would not impact nesting colonies of bees or impact overall bumble bee foraging

habitat, no compensatory mitigation would be required and no cumulative impacts are expected.

Given this, as per CESA, it was determined the project would not result in "take" of the Western bumble bee and obscure bumble bee, and would have "No Impact" on these bumble bee species.

Discussion of Bat Species

While several species of bats are considered state species of special concern, there are no CNDDB records of occurrences of special status bat species within the BSA in Cleone along SR 1. Other more common species may utilize the forested habitat. Conifer trees and snags lining the boundary of the ESL provide potentially suitable bat roosting habitat in cavities, sloughed bark, and broken limbs. No focused emergence surveys have been conducted to monitor bat use. While it is unlikely the trees are used as a day roost, bats in the area may use them for night roosting. Seasonally-appropriate emergence surveys throughout the year prior to construction would be conducted by a qualified biologist to fully assess bat presence.

The proposed project would involve removal of several trees within the ESL for utility pole relocation. This activity has the potential to directly impact bats hibernating or roosting in trees in crevices, cavities, or exfoliating bark. These trees may provide marginal day and night roosting habitat, although it is unlikely bats would utilize these trees due to their proximity to the road. Project tree removal is not expected to impact maternity colonies of bats raising young because tree removal would occur outside of the maternity season. The trees would be removed between September 16th and January 31st.

Other project impacts to these species could occur as a result of indirect auditory disturbance associated with construction noise levels that could temporarily displace suitable day roosting habitat. Because of the relatively high ambient noise level which currently exists due to passing traffic onsite, and as increases in sound level would likely be greatly attenuated by the structure of the roosting habitat itself (Taylor 2006), noise impacts to bats are expected to be minimal.

The following additional measures would be included in the project to avoid the potential for impacts to tree-roosting bats:

- If seasonal emergence surveys indicate bat roosting behavior in the ESL, areas proposed for tree removal for utility relocation in suitable habitat (e.g., trees with large cavities, snags) must be surveyed by a qualified contractor-supplied bat biologist to determine if day roosting bats are present no less than 7 days and no more than 14 days prior to the beginning of tree removal, regardless of season.
- If any day roost sites are detected, tree removal must occur during the fall season, after the bat maternity season (ending August 31) and before bats begin hibernating or migrating (October 31). Within this period, a qualified contractor-supplied bat biologist would provide CDFW with a bat exclusion plan. The contractor-supplied biologist would continue monitoring the roost with emergence surveys to ensure no bats are in the roosts before the trees are removed.
- The work is expected to occur during the daytime, which would avoid impacts to night roosting bats. However, in case of any night work, lighting would be focused on the road so as not to disrupt the flight path of any bats through the project area.

Since the project would not permanently impact bat habitat, result in take of individual bats, or substantially impact roosting and foraging behavior, no compensatory mitigation would be required. Substantial impacts to roosting bats are not anticipated; therefore, no cumulative impacts are expected.

Given this, it was determined the project would have a "Less Than Significant Impact" on pallid bat, Townsend's big-eared bat, and other bat species because they are unlikely to be impacted by project activities.

Discussion of Migratory Birds

No point count surveys were conducted to specifically observe and record all migratory birds. All migratory birds observed during other surveys and site visits were recorded.

No active nests would be removed or altered during project activities. Small shrub and tree removal and work in close proximity to an active nest could affect nesting birds. Pre-construction nesting bird surveys would be performed by a qualified biologist to identify potential threats from project activities and to provide opportunity to develop appropriate avoidance measures. Impacts to migratory birds are not anticipated given the minimal

amount of vegetation to be removed, temporary nature of the project, and the standard measures used to avoid disturbing active nests.

Impacts on migratory birds or their nests are not anticipated with incorporation of standard measures. Impacts to migratory birds are not anticipated; therefore, no compensatory mitigation would be required. Impacts to migratory birds are not anticipated; therefore, no cumulative impacts are expected.

Given this, it was determined the project would have "No Impact" on migratory birds.

Given the above, it was determined the project would have "Less Than Significant Impact" on CEQA Environmental Checklist Question 2.4 a).

Discussion of CEQA Environmental Checklist Question 2.4 b)—Biological Resources

> ***b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service?***

The project Environmental Study Limits (ESL) and Biological Study Area (BSA) support sensitive natural communities (SNC) and riparian vegetation. Sensitive Natural Communities identified within the proposed project location include the Bishop Pine Forest Alliance and the Wax Myrtle Scrub Shrubland Alliance.

Discussion of Sensitive Natural Communities

Discussion of Bishop Pine Forest Alliance

Bishop pine forest does not occur within the ESL, but can be found in two places within the BSA. The first occurrence is a 0.55-acre stand in a private campground adjacent to the southwest portion of the ESL. The canopy is dense with over 80% mature Bishop pine cover. This stand lacks a shrub layer and, due to routine private campground maintenance such as mowing, the understory is sparse with nonnative sweet vernal grass. The second occurrence of Bishop pine forest occurs approximately 25 feet to the southeast of the northbound lane of SR 1 between Dusty Lane and Nameless Lane. This 0.17-acre stand has a developed shrub layer dominated by tanoak. The understory is primarily California blackberry and sweet vernal grass.

No vegetation removal for the project would occur within the Bishop pine SNC. Project activities would have no impact on the overall quality, characteristics or structure of the Bishop pine SNC.

As Bishop Pine Forest Alliance would not be affected by the proposed work, no additional avoidance and minimization measures are proposed, no compensatory mitigation would be required, and no cumulative impacts are expected.

Given this, it was determined the project would have no impact to the Bishop Pine Forest Alliance SNC.

Discussion of Wax Myrtle Scrub Shrubland Alliance

No Wax Myrtle Scrub SNC was observed within the ESL. Approximately 0.28 acre of Wax Myrtle Scrub SNC was found in the northwest corner of the BSA, approximately 80 feet west of the northernmost extent of the ESL, with the community extending farther west within mesic shrubland and Bishop pine forest openings. This natural community comprises a sparse canopy of conifers, such as grand fir and Bishop pine, including remaining snags and dead trees. The shrub layer is approximately 10 feet tall, exceptionally dense, dominated by wax myrtle and deciduous huckleberry. Within the BSA, this SNC is a mixture of wax myrtle, evergreen huckleberry, Himalayan blackberry, grand fir, Bishop pine, tanoak, and California blackberry.

No vegetation removal for the project would be within the Wax Myrtle Scrub SNC. Project activities would not impact the overall quality, characteristics or structure of the Wax Myrtle Scrub SNC.

As Wax Myrtle Scrub SNC would not be affected by the proposed work, no additional avoidance and minimization measures are proposed, no compensatory mitigation would be required, and no cumulative impacts are expected.

Given this, it was determined the project would have no impact to the Wax Myrtle Scrub Shrubland Alliance SNC.

Discussion of Riparian Vegetation

The proposed project would have a minor impact on riparian vegetation. Approximately 0.005 acre of upland riparian vegetation would be temporarily disturbed on the banks of RPW-1 at PM 65.16. To account for impacts to riparian vegetation at the culvert outlet, a Section 1602 Lake and Streambed Alteration Agreement from CDFW would be necessary. Any riparian vegetation that would be impacted would be temporary and would be restored onsite and in-kind upon completion of construction.

As riparian vegetation would be only temporarily impacted by the proposed work, no additional avoidance and minimization measures are proposed, no compensatory mitigation would be required, no cumulative impacts are expected.

Given this, it was determined the project would have a "Less Than Significant Impact" on CEQA Environmental Checklist Question 2.4 b).

Discussion of CEQA Environmental Checklist Question 2.4 c)—Biological Resources

> ***c) Would the project 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?***

The proposed project would result in both permanent and temporary impacts to potentially jurisdictional waters within the project Environmental Study Limits. One potentially jurisdictional palustrine wetland under CWA 404 regulations is present adjacent to SR 1 at PM 65.30. Approximately 0.014 acre would be permanently impacted by project activities. The loss in wetland area would be restored off-site at an agency-approved mitigation site in the region. Much of the impacts to potentially jurisdictional waters are due to fill in existing drainage ditches to support road shoulder widening and culvert replacement. There are three unique drainages (i.e., other waters) entirely or at least partially within the ESL. Permanent impacts to these waters that convey groundwater and stormwater runoff to the southwest total

approximately 0.038 acre. In addition, temporary impacts of approximately 0.002 acre to a perennial drainage (RPW-1) would be incurred due to soil disturbance on the banks of the channel (below OHWM) for replacement of an existing culvert.

There is a coastal wetland adjacent to the east of the northbound lane of SR 1 that is jurisdictional under the California Coastal Act. This feature would incur approximately 0.008 acre of permanent impacts.

Cumulative Impacts

Given the scope and scale of the potential effects, the inclusion of standard measures, and proposed mitigation measures, the proposed project would not have a cumulative impact on jurisdictional waters.

Mitigation Measures

The State of California has a "no net loss" jurisdictional waters policy. Due to project activities, the loss of up to 0.052 acre of waters protected under Sections 404 and 401 of the CWA and 0.008 acre of waters protected under the CCA would be offset through in-kind restoration off-site in the same region. Appropriate mitigation ratios and measures would be identified and coordinated through the USACE, NCRWQCB, and Mendocino County.

Given this, it was determined the project would have a "Less Than Significant Impact with Mitigation" regarding CEQA Environmental Checklist Question 2.4 c).

2.5. Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	N/A	N/A	N/A	✓
Would the project: b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	N/A	N/A	N/A	✓
Would the project: c) Disturb any human remains, including those interred outside of dedicated cemeteries?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Historic Property Survey Report dated June 30, 2020 (Caltrans 2020d). A literature review, Native American consultation, and field surveys were performed finding that potential impacts to historical or archaeological resources are not anticipated due to the absence of resources in the project area. The State Historic Preservation Office concurred with this finding in a letter dated August 5, 2020 (Appendix D).

2.6. Energy

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	N/A	N/A	N/A	✓
Would the project: b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Air Quality Analysis dated June 26, 2020 (Caltrans 2020b). Potential impacts to energy are not anticipated. Proposed project construction would primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Energy use associated with proposed project construction is estimated to result in the total short-term consumption of 3,915 gallons from diesel-powered equipment and 2,444 gallons from gasoline-powered equipment. This represents a small demand on local and regional fuel supplies that would be easily accommodated, and this demand would cease once construction is complete.

Construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuel would have no noticeable effect on peak or baseline demands for energy. Therefore, the project would not result in an inefficient, wasteful, and unnecessary consumption of energy.

2.7. Geology and Soils

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	N/A	N/A	N/A	✓
ii) Strong seismic ground shaking?	N/A	N/A	N/A	✓
iii) Seismic-related ground failure, including liquefaction?	N/A	N/A	N/A	✓
iv) Landslides?	N/A	N/A	N/A	✓
Would the project: b) Result in substantial soil erosion or the loss of topsoil?	N/A	N/A	N/A	✓
Would the project: c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	N/A	N/A	N/A	✓
Would the project: d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	N/A	N/A	N/A	✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	N/A	N/A	N/A	✓
Would the project: f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, and the California Geological Survey regulatory maps. No faults, unstable geological units or soils, or expansive soil were identified within the project limits. Due to the existing developed setting, no unique geological or paleontological resources are anticipated.

2.8. Greenhouse Gas Emissions

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	N/A	N/A	✓	N/A
Would the project: b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	N/A	N/A	N/A	✓

Discussion of CEQA Environmental Checklist Question 2.8 a) Greenhouse Gas Emissions

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for

and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values "the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the *Energy Policy and Conservation Act of 1975 (42 USC Section 6201*) and *Corporate Average Fuel Economy (CAFE) Standards*. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA, in conjunction with the National Highway Traffic Safety Administration (NHTSA), is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (CARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires the CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. The CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012): Orders State entities under the direction of the Governor, including the CARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015): Establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs the CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e).[1] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016: Codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016: Declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies,

[1] GHGs differ in how much heat each traps in the atmosphere (global warming potential or GWP). CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent" (CO_2e). The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.

regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017: Allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires the CARB to prepare a report that assesses progress made by each Metropolitan Planning Organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018): Sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019): Advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs the CARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

Environmental Setting

The proposed project is located in a rural area, with a primarily natural-resources based agricultural and tourism economy. SR 1 is the main transportation route to and through the area for both passenger and commercial vehicles, traversing much of California's coast and following nearly the full length of the Mendocino County coastline. Traffic counts are low in the project area, and SR 1 is rarely congested; however, the summer season does have higher traffic volumes due to recreational tourism.

The Mendocino Council of Governments' (MCOG) Regional Transportation Plan (RTP) guides transportation development in Mendocino County. The Mendocino County General Plan was adopted in 2009 and does not specifically address GHGs or climate change.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. The U.S. EPA is responsible for documenting GHG emissions nationwide, and the CARB does so for the State, as required by H&SC Section 39607.4.

National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change (Figure 5). The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO_2, CH_4, N_2O, HFCs, perfluorocarbons, SF_6, and nitrogen trifluoride. It also accounts for emissions of CO_2 that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO_2 (carbon sequestration). The 1990–2016 inventory found that of 6,511 $MMTCO_2e$ GHG emissions in 2016, 81% consist of CO_2, 10% are CH_4, and 6% are N_2O; the balance consists of fluorinated gases (U.S. EPA 2018). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.

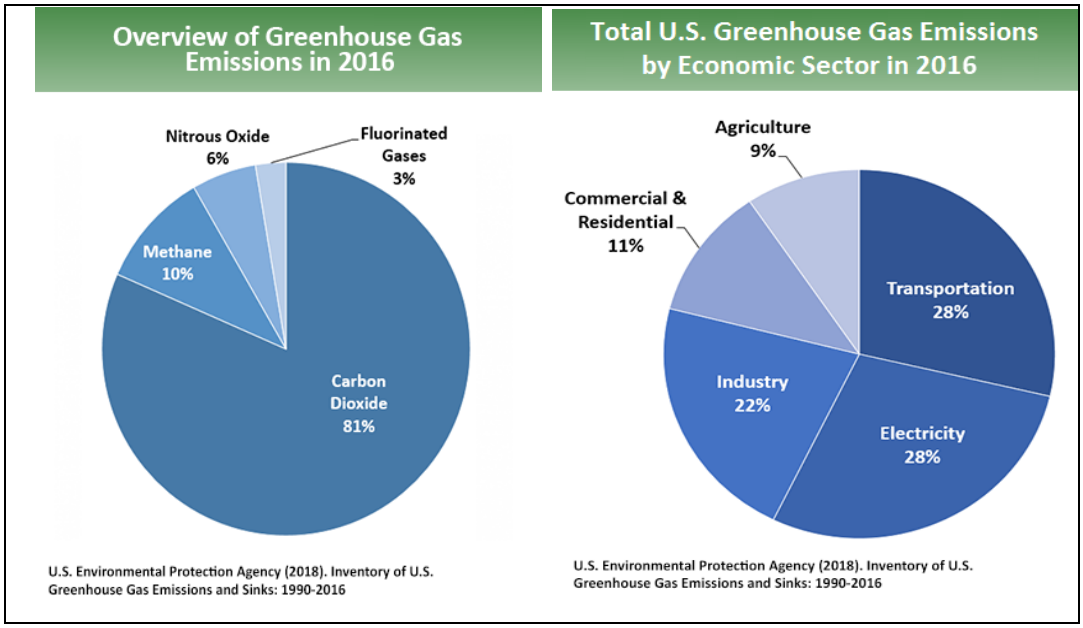


Figure 5. U.S. 2016 GHG Gas Emissions (U.S. EPA 2018)

State GHG Inventory

The CARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 MMTCO2e for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (Figures 6 and 7) (CARB 2019a, b).

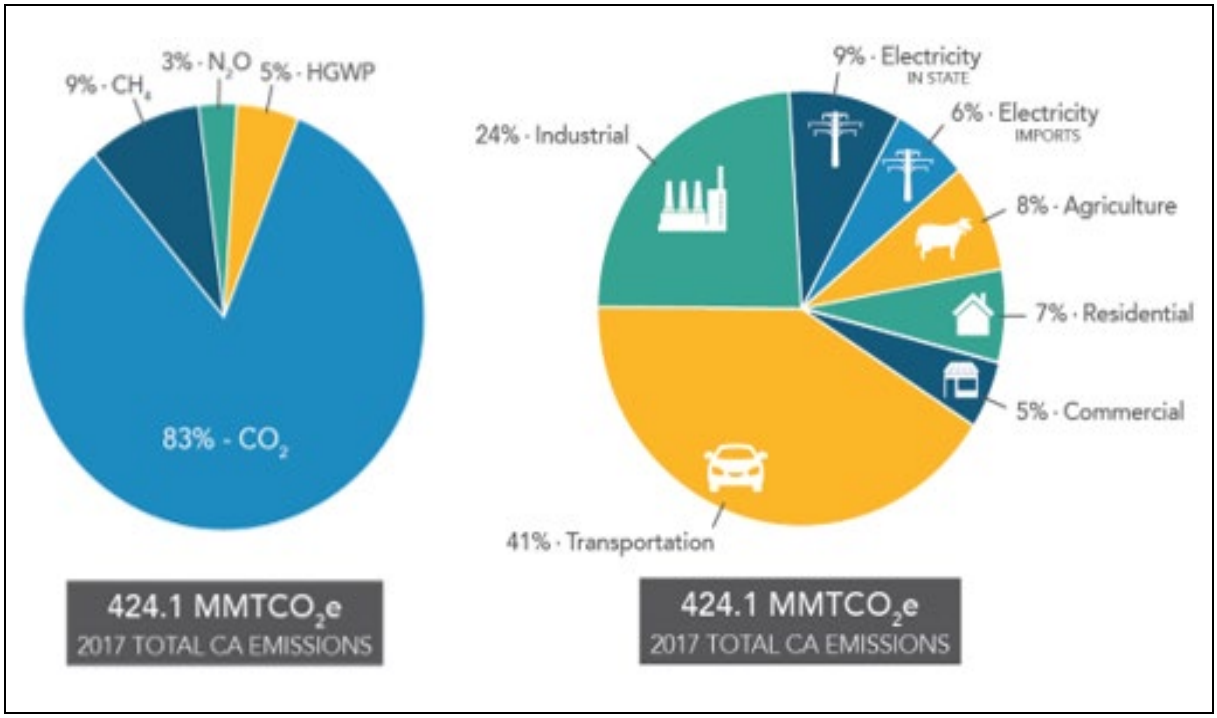


Figure 6. California 2017 Greenhouse Gas Emissions

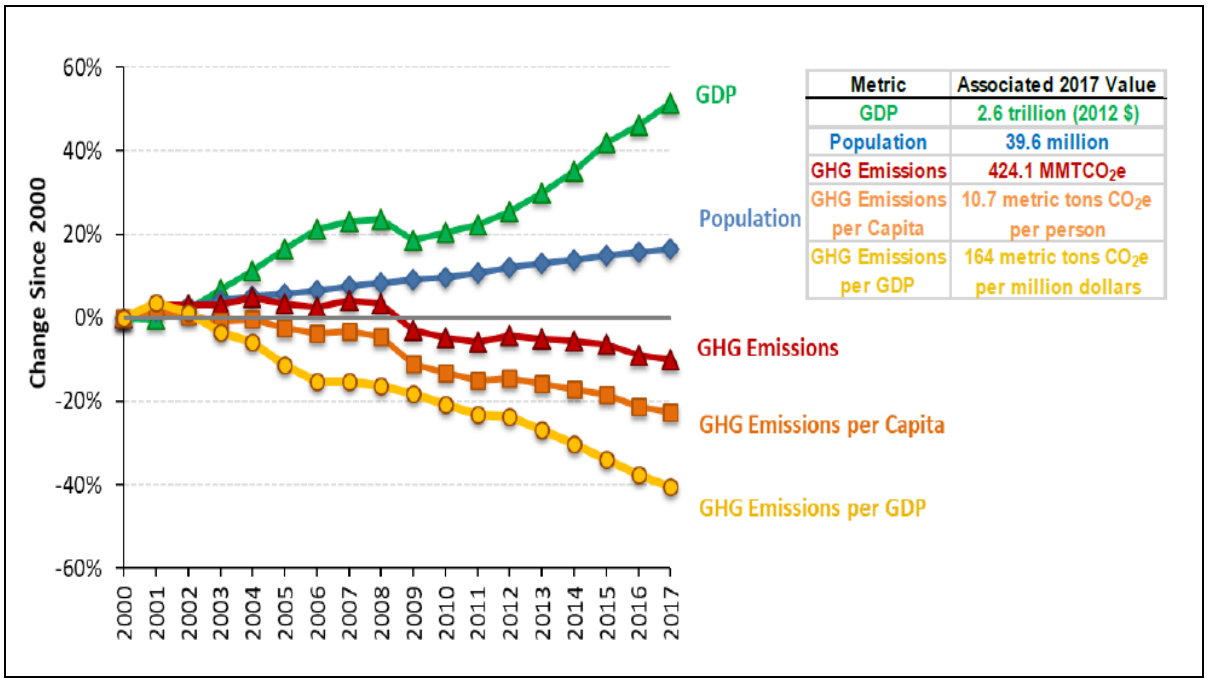


Figure 7. Change in California GDP, Population, and GHG Emissions Since 2000

(Source: CARB 2019b)

AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. The CARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

Regional Plans

CARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. However, Mendocino County does not have a MPO and therefore CARB does not establish a GHG reduction target for the county. Mendocino County of Governments (MCOG) serves as the responsible regional transportation agency for Mendocino County cities and unincorporated areas. Mendocino Council of Governments prepares an RTP; the 2017 RTP was adopted February 5, 2018. The 2017 RTP outlines policies and goals intended to reduce GHGs. The RTP's climate change objectives include "Improve resiliency of the region's transportation system to climate related impacts." (MCOG 2018). The State Highway System element of the RTP identifies various long-range safety and operational projects needed on SR 1 if funding becomes available (MCOG 2018).

Mendocino County has a climate action plan; however, it does not address transportation projects specifically. In 2019, the County agreed to form a Mendocino County Climate Action Advisory Committee to make recommendations to the Board of Supervisors regarding implementation of a Mendocino County Sustainability and Climate Action Program.

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System (SHS) and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines §§ 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The purpose of the project is to widen the shoulders for safety purposes, while also improving drainage features, and would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on SR 1, no increase in vehicle miles traveled (VMT) would occur due to construction of the project. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions would be produced 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, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

The Caltrans Construction Emission Tool (CAL-CET2018, Version 1.3) was used to estimate average carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs) emissions from proposed construction activities. Table 4 illustrates the estimated GHG emissions of 47 metric tons of CO_2 (the dominant GHG) during the approximately 70-day project construction period.

Table 4. Estimate of GHG Emissions During Construction (U.S. Tons)

Construction Year	$C0_2$	CH_4	N_2O	HFCs	CO_{2e}*
2022	47	0.001	0.003	0.002	77.519
Total	47	0.001	0.003	0.002	77.519

* A quantity of GHG is expressed as carbon dioxide equivalent (CO_{2e}) that can be estimated by the sum after multiplying each amount of CO_2, CH_4, N_2O, and HFCs by its global warming potential (GWP). The GWPs of CO_2, CH_4, N_2O, and HFCs are 1, 25, 298, and 14,800, respectively.

The proposed project would include Caltrans Standard Specifications Sections 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and would comply with all CARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes.

Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions. Additionally, a Transportation Management Plan would be implemented during construction to minimize traffic delays.

CEQA Conclusion

While the proposed project would result in GHG emissions during construction, it is anticipated the project would not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals (Figure 8) that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to fifty percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, Safeguarding California.

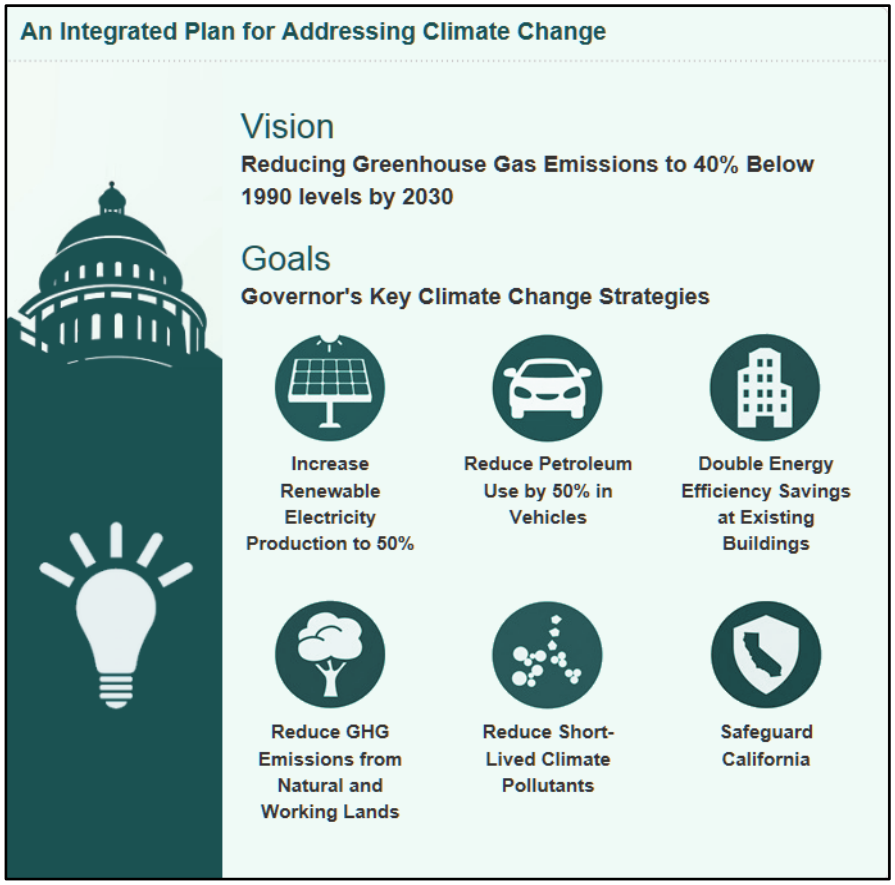


Figure 8. California Climate Strategy

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled. A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EOs S-3-05 and S-01-07 to help achieve the targets set forth in AB 32. Executive Order B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with CO_2 reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, rather than continuing to expand capacity on existing roadways, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies.

Senate Bill 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

Caltrans Policy Directives and Other Initiates

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Project-Level Greenhouse Gas Reduction Strategies

The following measures would also be included in the proposed project to minimize GHG emissions from project activities:

- The construction contractor must comply with the *2018 Caltrans Standard Specifications* Section 14-9. / Section 14-9.02 which specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including the Mendocino Air Quality Management District regulations and local ordinances.

- Compliance with Title 13 of the California Code of Regulations, which includes idling restrictions of construction vehicles and equipment to no more than five minutes.
- Caltrans 2018 Standard Specification 7-1.02C "Emissions Reduction" which ensures construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board.
- Utilize a Transportation Management Plan to minimize vehicle delays.
- To the extent feasible, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

Adaptation Strategies

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges, combined with a rising sea level, can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects would vary by location and may, in the most extreme cases, require a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the President every four years, in accordance with the Global Change Research Act of 1990 (15 USC Chapter 56A § 2921 et seq.). The Fourth National Climate Assessment, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk

reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime" (USGCRP 2018).

The *U.S. DOT Policy Statement on Climate Adaptation* in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (U.S. DOT 2011).

FHWA Order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events, December 15, 2014*) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (State of California 2018) is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.

- *Resilience* is the "capacity of any entity—an individual, a community, an organization, or a natural system—to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factors. These factors include, but are not limited to, ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions to state agencies on how to incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California—An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017 to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure*—Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence*—Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization*—Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Project Adaptation Efforts

Sea-Level Rise

The project is located adjacent to, but outside of, areas expected to be affected by predicted sea-level rise. Under a high-emissions scenario (RCP 8.5), using the tide gauge located at Arena Cove, it is estimated there is 66 percent probability that sea-level will increase at this location from 0.6 feet to 1.3 feet by 2060 (State of California Sea-Level Rise Guidance 2018 Update). The probability of sea-level rise reaching or exceeding 3 feet by 2060 is 20 percent. The project location was evaluated for SLR effects using NOAA's Sea-Level Rise Viewer. The project location would not be inundated if sea-level rose by 3 feet.

Floodplains

Annual average precipitation ranges from 40 to 100 inches in the project region. The project area was evaluated using the Flood Insurance Rate Map (FIRMette) 06045C1010G . The project lies within Zone X, which is outside the 100-year floodplain and considered an area of minimal flood hazard. The proposed project would not cause or exacerbate the risk of flood.

Precipitation in the future is expected to come in less frequent but heavier intermittent rainfall events. The Caltrans District 1 Climate Change Vulnerability Assessment (Caltrans 2019) maps the potential for up to 9.9% increase in 100-year storm precipitation depth in the project area by 2055, under an RCP 8.5 scenario (no reduction in GHG emissions). The 100-year storm precipitation depth is a metric commonly used in design of transportation facilities. The proposed project would replace existing deteriorated culverts with larger elliptical concrete pipe, install stormwater BMPs such as bioswales, and revegetate disturbed slopes with native species to control erosion. Outlet protection and velocity dissipation measures would avoid any new concentrated stormwater flows. These measures should improve drainage and protect project features compared to existing conditions.

Wildfire

Cleone is situated in the wildland-urban interface along the coast. According to the Fire Hazard Severity Zone (FHSZ) Viewer (Figure 9), the project is in an area of moderate to high fire hazard severity (CALFIRE 2020). While average temperatures on the coast are currently relatively mild, increased precipitation due to climate change could lead to an increase in fuel in already fire-prone locations. The proposed project would not cause or exacerbate the risk of wildfire as it is not adding any additional structures. New elliptical concrete pipe culverts would be resistant to fire.

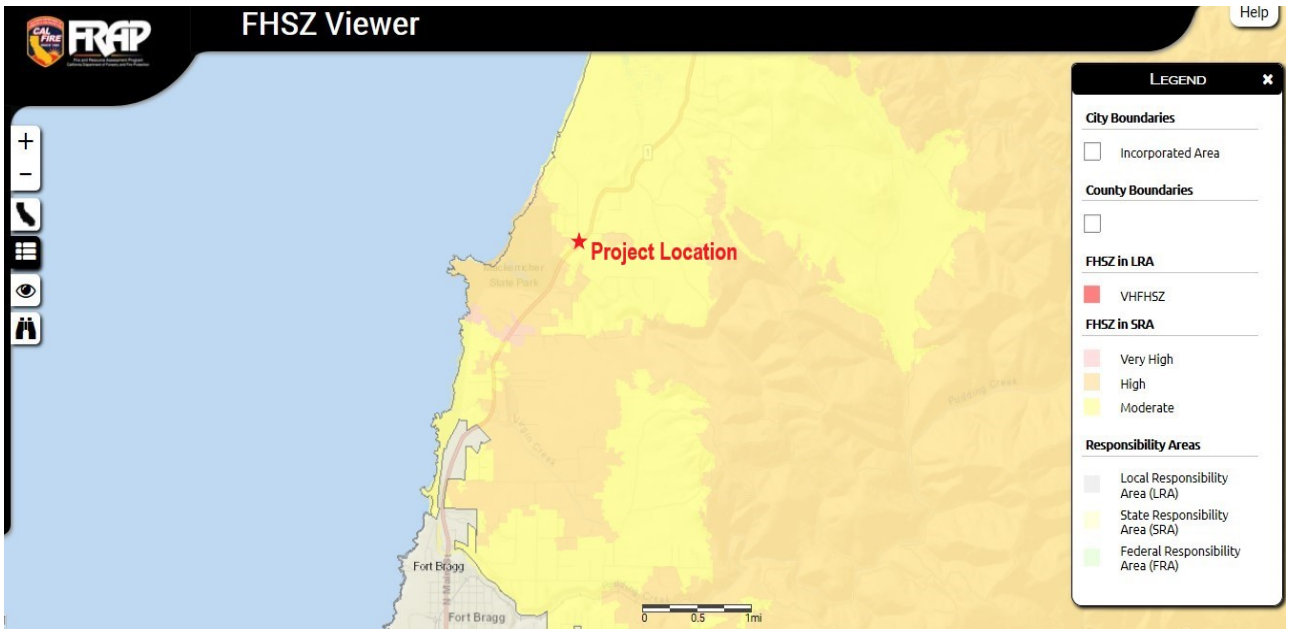


Figure 9. FHSZ Viewer Map for Proposed Project Location

Given this, it was determined the project would have a "Less Than Significant Impact" on CEQA Environmental Checklist Question 2.8 a).

Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.9. Hazards and Hazardous Materials

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	N/A	N/A	N/A	✓
Would the project: b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	N/A	N/A	N/A	✓
Would the project: c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	N/A	N/A	N/A	✓
Would the project: d) 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?	N/A	N/A	N/A	✓
Would the project: e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	N/A	N/A	N/A	✓

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	N/A	N/A	N/A	✓
Would the project: g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Initial Site Assessment (ISA) dated December 21, 2017 (Caltrans 2017a). Prior to construction, soil sampling would be conducted to evaluate the presence of aerially deposited lead. Based on the results of sampling, the appropriate Special Standard Provisions for management of lead material would be applied to the project. The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would not create a significant hazard to the public or the environment. There are no hazardous waste sites or businesses commonly associated with hazardous waste generation nearby. In addition, there are no existing or proposed schools within one-quarter mile of the project. This project would not impair implementation or physically interfere with emergency response or expose people or structures to a significant risk of loss, injury or death involving wildland fires.

2.10. Hydrology and Water Quality

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	N/A	N/A	N/A	✓
Would the project: b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	N/A	N/A	N/A	✓
Would the project: c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;	N/A	N/A	N/A	✓
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	N/A	N/A	N/A	✓
(iii) 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	N/A	N/A	N/A	✓
(iv) impede or redirect flood flows?	N/A	N/A	N/A	✓
Would the project: d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	N/A	N/A	N/A	✓
Would the project: e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Water Quality Assessment dated June 24, 2020 (Caltrans 2020e). Potential impacts to hydrology and water quality are not anticipated due to Caltrans BMPs that would be incorporated into the approved project Stormwater Pollution Prevention Plan.

2.11. Land Use and Planning

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Physically divide an established community?	N/A	N/A	N/A	✓
Would the project: b) 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?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. The proposed project would not physically divide an established community or 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.

2.12. Mineral Resources

Question:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	N/A	N/A	N/A	✓
Would the project: b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Mineral Resources are not anticipated as there are no known mineral resources present.

2.13. Noise

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project result in: a) 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?	N/A	N/A	N/A	✓
Would the project result in: b) Generation of excessive groundborne vibration or groundborne noise levels?	N/A	N/A	N/A	✓
Would the project result in: c) 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 airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Noise Analysis dated July 19, 2019 (Caltrans 2019a). During construction, noise may be generated from the contractors' equipment and vehicles; however, construction noise would be regulated by *Caltrans Standard Specifications*—Section 14-8.02, "Noise Control", which states "Do not exceed 86 dBA maximum sound level at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m." Work that would produce noise over 86 dBA would be restricted to daytime work hours only.

2.14. Population and Housing

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) 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)?	N/A	N/A	N/A	✓
Would the project: b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Population and Housing are not anticipated as the project does not involve activities that would induce substantial unplanned population growth in an area, either directly or indirectly, or displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

2.15. Public Services

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) 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: Fire protection?	N/A	N/A	N/A	✓
Police protection?	N/A	N/A	N/A	✓
Schools?	N/A	N/A	N/A	✓
Parks?	N/A	N/A	N/A	✓
Other public facilities?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Impacts to Public Services are not anticipated as the proposed project does not have the potential to adversely affect public services, including the ability of Caltrans to operate and maintain the State Highway System. Any impacts to traffic would be temporary in nature. A Transportation Management Plan would be implemented to allow emergency service vehicles, pedestrians, and bicyclists to be accommodated through the work zone with continued access to SR 1 during construction activities.

2.16. Recreation

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	N/A	N/A	N/A	✓
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. While MacKerricher State Park is approximately 500 feet to the southwest, the project would not increase use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. In addition, the project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

2.17. Transportation

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	N/A	N/A	N/A	✓
Would the project: b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	N/A	N/A	N/A	✓
Would the project: c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	N/A	N/A	N/A	✓
Would the project: d) Result in inadequate emergency access?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Any impacts to traffic would be temporary in nature. In addition, access to driveways, houses, and cross streets would be maintained. Emergency service vehicles, pedestrians, and bicyclists would be accommodated throughout the work zone. The project would follow a Transportation Management Plan and comply with Caltrans Standard Specifications Section 7-1.03 "Public Convenience" (Caltrans 2018a).

2.18. Tribal Cultural Resources

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, or 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 as defined in Public Resources Code § 5020.1(k), or	N/A	N/A	N/A	✓
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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Native American consultation was initiated on February 14, 2019, through written notification (Caltrans 2020d) to representatives of the following tribes: Sherwood Valley Rancheria; Cloverdale Rancheria; Coyote Valley Rancheria; Hopland Rancheria; Cahto Tribe of Laytonville Rancheria; Manchester Point Arena Band of Pomo Indians; Pinoleville Pomo Nation; and Round Valley Indian Tribe. No response was received.

2.19. Utilities and Service Systems

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project: a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities—the construction or relocation of which could cause significant environmental effects?	N/A	N/A	✓	N/A
Would the project: b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	N/A	N/A	N/A	✓
Would the project: c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	N/A	N/A	N/A	✓
Would the project: d) 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?	N/A	N/A	N/A	✓
Would the project: e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	N/A	N/A	N/A	✓

A "No Impact" determination was made for Questions b), c), d), and e) listed within the CEQA Utilities and Service Systems section. See below for further discussion of the "Less Than Significant Impact" determination for Question a).

Regulatory Setting

The primary law governing utilities and service systems is CEQA.

Environmental Setting

Pacific Gas & Electric and AT&T Communications own utilities within the project limits. Up to 15 utility poles would need to be relocated for the purposes of widening the shoulders along SR 1 within the project limits.

Discussion of CEQA Environmental Checklist Question 2.19 a)—Utilities and Service Systems

> ***a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities—the construction or relocation of which could cause significant environmental effects?***

The project would require the relocation of utility poles to accommodate shoulder widening. Though exact locations for utility relocation would be determined in future project phases, Caltrans has determined the relocation of up to 15 utility poles would not cause significant environmental effects as they would be relocating already existing poles. Relocation efforts would be coordinated between the affected utility companies and Caltrans.

Given this, it was determined the project would have a "Less Than Significant Impact" described under CEQA Environmental Checklist Question 2.19 a).

Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, mitigation measures have not been proposed for the project.

2.20. Wildfire

Question	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project: a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	N/A	N/A	N/A	✓
b) 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?	N/A	N/A	N/A	✓
c) 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 may result in temporary or ongoing impacts to the environment?	N/A	N/A	N/A	✓
d) 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?	N/A	N/A	N/A	✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. The project would not impair emergency evacuation, increase the spread of a wildfire, exacerbate fire risk, expose people or structures to significant fire risks, or add additional structures in a moderate to high fire hazard severity area.

The project is within a moderate to high fire hazard severity zone (CALFIRE 2020). The average annual maximum temperature at the proposed project location is 60.3°F with the warmest month occurring in July with an average temperature of 68°F. The average annual minimum temperature in this location is 43.2°F with the coldest month occurring in January with an average temperature of 41°F. The average annual precipitation recorded is 41 inches. The majority of the precipitation in this location falls between November and March (Caltrans 2020f). The coastal climate and fog and close proximity to the ocean create a low likelihood of increased fire risk.

2.21. Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) 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, or eliminate important examples of the major periods of California history or prehistory?	N/A	N/A	N/A	✓
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means 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.)	N/A	N/A	N/A	✓
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	N/A	N/A	N/A	✓

Discussion of CEQA Environmental Checklist Question 2.21—Mandatory Findings of Significance

The California Environmental Quality Act of 1970 (CEQA) requires preparation of an Environmental Impact Report (EIR) when certain specific impacts may result from construction or implementation of a project. The analysis indicated the potential impacts associated with this project would not require an EIR. Mandatory Findings of Significance are not required for projects where an EIR has not been prepared.

2.22. Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative impact assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time (CEQA § 15355).

Cumulative impacts to resources may result from residential, commercial, industrial, and highway development, as well as agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

Per Section 15130 of CEQA, a Cumulative Impact Analysis (CIA) discussion is only required in "…situations where the cumulative effects are found to be significant." An EIR is required in all situations when a project might result in a "significant" direct, indirect, or cumulative impact on any resource. The proposed project would not result in a "significant" direct, indirect, or cumulative impact on any resource. Given this, an EIR and CIA were not required for this project.

Chapter 3. Agency and Public Coordination

Agency and Public Coordination

Early and continuing coordination with the regulatory agencies and the general public is an essential component of the environmental planning process. It helps planners determine the necessary scope of environmental documentation, the level of analysis required, identify any potential impacts and avoidance, minimization and/or mitigation measures, and related environmental requirements.

This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

Coordination with Resource Agencies

Agency consultations for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings, interagency coordination meetings, and a field visit at the project location. Caltrans consulted with USFWS, NMFS, and CDFW (see Table 5 below for early coordination efforts). Caltrans would continue coordination efforts with regulatory agencies as the project development process moves forward.

Table 5. Coordination with Environmental Resource Agencies

Date	Personnel	Notes
February 2, 2019	Tracy Walker, Caltrans Biologist	Caltrans requested and received a species list from NMFS for the project area.
February 2, 2019	Tracy Walker, Caltrans Biologist	Caltrans requested and received a species list from USFWS for the project area using IPaC.
March 19, 2020	Tracy Walker, Caltrans Biologist; Stephanie Frederickson, Caltrans Senior Resource Specialist; Scott Burger, Environmental Coordinator; Jennifer Olson, CDFW	Phone meeting with new CDFW liaison to discuss resources present and level of consultation, particularly for Section 1602 resources.
April 10, 2020	Tracy Walker, Caltrans Biologist; Elena Meza, NMFS	Caltrans presented information to NMFS in an email explaining rationale for "no effect" determination of the project on any protected species within NMFS jurisdiction.
April 23, 2020	Tracy Walker, Caltrans Biologist; Gregory Schmidt, USFWS	Caltrans presented information to USFWS via telephone conversation explaining rationale for "no effect" determination of the project on any protected species within USFWS jurisdiction.

Chapter 4. List of Preparers

The following individuals performed the environmental work on the project:

California Department of Transportation, North Region

Phlora Barbash	Landscape Associate | Landscape Architecture
Bryan Bet	Project Manager
Youngil Cho	Transportation Engineer | Air and Noise
Jennifer Gagnon	Associate Environmental Planner | Coordinator
Jackie Farrington	Environmental Planner | Archaeology
Brandon Larsen	North Region Environmental Office Chief
Mark Melani	Associate Environmental Planner | Hazardous Waste
Oscar Rodriguez	Transportation Engineer | Hydrology and Water Quality
Sumandeep Sudini	Project Engineer
Liza Walker	Senior Environmental Planner | Branch Chief
Tracy Walker	Associate Environmental Planner | Biology

Chapter 5. Distribution List

Federal and State Agencies

California Department of Fish and Wildlife
619 2nd Street
Eureka, CA 95501

California State Clearinghouse
P.O. Box 3044
Sacramento, CA 95812

North Coast Regional Water Quality Control Board
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403

Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816-7100

United States Army Corps of Engineers
1455 Market Street #16
San Francisco, CA 94103

Regional/County/Local Agencies

Mendocino County Planning & Building Services
860 N Bush Street
Ukiah, CA 95482

Chapter 6. References

California Air Resources Board (CARB). 2019a. *California Greenhouse Gas Emissions Inventory–2019 Edition*. https://ww3.arb.ca.gov/cc/inventory/data/data.htm. Accessed June 2020.

_____.2019b. *California Greenhouse Gas Emissions for 2000 to 2017. Trends of Emissions and Other Indicators.* https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf. Accessed: June 2020.

Calflora. 2020. *Point Reyes Ceanothus* (*Ceanothus gloriosus var. gloriosus)*. https://www.calflora.org/cgi-bin/species_query.cgi?where-taxon=Ceanothus+gloriosus+var.+gloriosus. Accessed: May 2020.

California Department of Fish and Wildlife (CDFW). 2020. Biogeographic Data Branch. California Natural Diversity Database (CNDDB) Rarefind 5 (Government Version. https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed: June 2020.

_____.2019. California Department of Fish and Game. *Natural Communities List*. http://www.dfg.ca.gov/biogeodata/vegcamp/natural_communities.asp. Accessed: April 2020.

_____.2018. *Protocols for Surveying and Evaluating Special Status Native Plant Populations and Natural Communities*.: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline. Accessed: June 2020.

California Department of Transportation. 2020a. *Visual Impact Assessment*. District 1. Technical Report. June. Prepared by Phlora Barbash.

_____. 2020b. *Air Quality Assessment.* District 1. Memorandum. June. Prepared by Youngil Cho.

_____. 2020c. *Natural Environment Study.* District 1. Technical Report. June. Prepared by Tracy Walker.

_____. 2020d. *Historic Property Survey Report*. District 1. Technical Report. June. Prepared by Jacqueline Farrington.

_____. 2020e. *Water Quality Assessment*. District 1. Memorandum. June. Prepared by Oscar Rodriguez.

_____. 2020f. Stormwater Data Report – Long Form. District 1. Memorandum. July.

_____. 2019a. *Noise Analysis*. District 1. Memorandum. July. Prepared by Youngil Cho.

_____. 2019b. *Culvert Inspection Results - Maintenance Hydraulics*. North Region. October.

_____. 2018a. *Standard Specifications*. https://dot.ca.gov/-/media/dot-media/programs/design/documents/2018-std-plns-for-web-a11y.pdf. Accessed: June 2020.

_____. 2018b. *Project Initiation Report to Request Programming in the 2018 SHOPP*. EA 01-0G600.

_____. 2018c. *Mini Preliminary Environmental Assessment Report.* February 2018.

_____. 2017a. *Initial Site Assessment* (ISA). Memorandum. Prepared by Mark Melani.

_____. 2017b. *Stormwater Quality Handbooks, Project Planning and Design Guide* (PPDG). CTSW-RT-314.24.1. http://www.dot.ca.gov/design/hsd/ppdg/PPDG-Final_2017-07.pdf.

_____. 2017c. Stormwater Quality Handbooks: Construction Site Best Management Practices (BMPs) Manual. CTSW-RT-17-314.18.1. http://www.dot.ca.gov/hq/construc/stormwater/CSBMP-May-2017-Final.pdf.

California Department of Forestry and Fire Protection (CALFIRE). 2020. Fire Hazard Severity Zones (FHSZ) Viewer. https://www.arcgis.com/apps/webappviewer/index.html?id=247ee51a5d2141479a395d7850d6a4ed. Accessed: June 2020.

California Herps. 2020. *Northern Red-Legged Frog - Rana Aurora*. http://www.californiaherps.com/frogs/pages/r.aurora.html. Accessed: June 2020.

California Invasive Plant Council (Cal-IPC). 2020. https://www.cal-ipc.org/. Accessed: June 2020.

California Native Plant Society (CNPS), Rare Plant Program. 2020. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. http://www.rareplants.cnps.org. Accessed: June 2020.

County of Mendocino. 2016. *Mendocino County Zoning Map*. https://www.mendocinocounty.org/government/planning-building-services/county-maps/zoning-maps. Accessed: June 2020.

_____. 2009. *Mendocino County General Plan*. https://www.mendocinocounty.org/government/planning-building-services/plans/mendocino-county-general-plan. Accessed: June 2020.

Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D. C. Biological Services Program. Dunk, J. R. 1995. *White-tailed Kite Elanus leucurus*. In A. Poole and F. Gill (eds.), The Birds of North America no. 178. Academy of Natural Sciences, Philadelphia, PA.

Dunk, J. R. 1995. *White-tailed Kite Elanus leucurus*. In A. Poole and F. Gill (eds.), The Birds of North America no. 178. Academy of Natural Sciences, Philadelphia, PA.

DZC Archaeology & Cultural Resource Consulting, LLC. 2020. *Archaeological Survey Report for the Cleone Shoulder Widening Project, Mendocino County, California.* May. Technical Report.

Federal Highway Administration (FHWA). 2019. *Sustainability.* https://www.fhwa.dot.gov/environment/sustainability/resilience/. Last updated February 2019. Accessed: June 2020.

Federal Highway Administration (FHWA). No date. *Sustainable Highways Initiative*. https://www.sustainablehighways.dot.gov/overview.aspx. Accessed: June 2020.

Federal Emergency Management Agency (FEMA). 2020. *Flood Insurance Rate Map (FIRMette). https://msc.fema.gov/portal/home*. Accessed: June 2020.

Giusti, G. A. 2014. *Watching the demise of a coastal forest type – Bishop pine*. A White Paper. California Forest Pest Council Winter. http://cemendocino.ucanr.edu/files/199447.pdf. Accessed June 2020.

Hatfield, R., S. Jepsen, E. Mader, S. H. Black, and M. Shepherd. 2012. Conserving Bumble Bees: Guidelines for Creating and Managing Habitat for America's Declining Pollinators. The Xerces Society for Invertebrate Conservation. http://www.xerces.org/bumblebees/guidelines. Accessed: June 2020.

Holland, V. L. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Unpublished report, California Department of Fish and Game, Natural Heritage Division, Sacramento, CA. 162 pp.

Mendocino Council of Governments. 2018. *2017 Mendocino County Regional Transportation Plan*. Final. Adopted February 2018. Prepared by Davey-Bates Consulting. Available: https://www.mendocinocog.org/2017-regional-transportation-plan-adopted. Accessed: July 2020.

Sawyer, J. O., T. Keeler-Wolf, and J. Evens. 2009. *A Manual of California Vegetation*. 2nd Edition. Sacramento, California: California Native Plant Society.

State of California. 2019. *California Climate Strategy*. https://www.climatechange.ca.gov/. Accessed: August 2019.

State of California. 2018. *California's Fourth Climate Change Assessment*. http://www.climateassessment.ca.gov/. Accessed: June 2020.

State Water Resources Control Board (SWRCB). 2013. *Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2012-0011-DWQ)*.

_____. *Construction General Permit Order 2009-0009-DWQ (as amended by Orders 2010-0014-DWQ and 2012-0006-DWQ)*.

Taylor, Daniel A. R. 2006. *Forest Management and Bats*. Bat Conservation International, National Fish and Wildlife Foundation, USDA Natural Resources Conservation Service.

Thorp, R.W., Horning, D.S., Dunning, L.L., 1983. *Bumble bees and Cuckoo Bumble bees of California*. University of California Press, Berkeley.

U.S. Department of Agriculture (USDA). 2002. Natural Resources Conservation Service (NRCS). 2019. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov. Accessed: April 2019.

_____.2002. *Plant Guide-Fact Sheet for Pacific Wax Myrtle* (*Morella californica*). Contributed by: USDA-NRCS National Plant Data Center. https://plants.usda.gov/plantguide/pdf/cs_moca6.pdf. Accessed: April 2020.

U.S. Department of Transportation (U.S. DOT). 2011. *Policy Statement on Climate Change Adaptation*. https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm. Accessed: June 2020.

U.S. Environmental Protection Agency (U.S. EPA). 2018. *Inventory of U.S. Greenhouse Gas Emissions and Sinks.* https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: June 2020.

U.S. Global Change Research Program (USGCRP). 2018. Fourth National Climate Assessment.

_____. 2019. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov. Accessed: April 2019.

U.S. Fish and Wildlife Service (U.S. FWS). 2020. *Official Species List*. http://ecos.fws.gov/ipac. Accessed: February 2020.

_____. 2019. *National Wetlands Inventory Website*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.D. http://www.fws.gov/wetlands/. Accessed: November 2019.

Vogl, R. J., Armstrong, W. P., White, K. L., Cole, K. L. 1977. *The closed-cone pines and cypress*. In: Barbour, M. G.; Major, J., editors. Terrestrial Vegetation of California. New York: John Wiley & Sons; 295-358.

Western Regional Climate Center (WRCC). 2019. *Western U.S. Climate Historical Summaries*. Climatological Data Summaries: Period of Record Monthly Climate

Xerces Society. 2012. *Data accessed from Bumble Bee Watch, a collaborative website to track and conserve North America's bumble bees*. http://www.bumblebeewatch.org/app/#/bees/lists. Accessed: June 2020.

_____. 2017. A Petition to the State of California Fish and Game Commission to List the Crotch bumble bee, Franklin's bumble bee, Suckley cuckoo bumble bee, and Western bumble bee as Endangered under the California Endangered Species Act.

Appendix A. Project Layouts

INDEX OF PLANS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	01	R65.1/65.5		

STATE OF CALIFORNIA

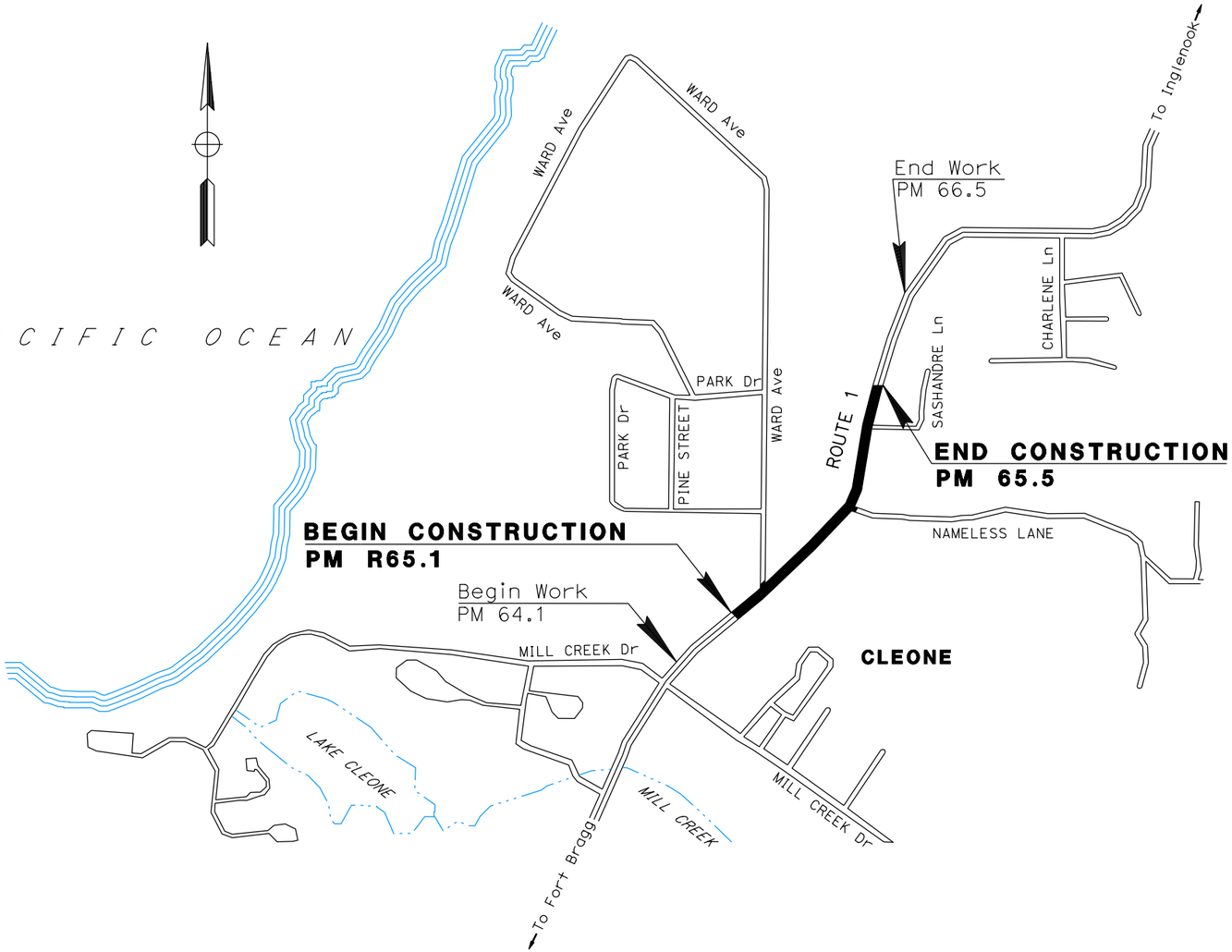
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR BUILDING CONSTRUCTION

STATE HIGHWAY

IN MENDOCINO COUNTY
IN CLEONE
FROM 0.1 MILE NORTH OF MILL CREEK DR
TO 0.3 MILE NORTH OF WARD AVENUE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2018



NO SCALE

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

PROJECT ENGINEER — DATE
REGISTERED CIVIL ENGINEER

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CONTRACT No.	01-0G600
PROJECT ID	0117000026

LAST REVISION 00-00-00
DATE PLOTTED => 27-JUL-2020
TIME PLOTTED => 13:40

PROJECT MANAGER: STEVEN BLAIR
DESIGN MANAGER: ELIAS KARAM

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	1	R65.1,65.5	-	-

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATIONS ARE SHOWN ON THE SUPERELEVATION DIAGRAMS.
3. EXACT LOCATIONS AND TYPES OF HMA DIKE ARE SHOW ON THE LAYOUTS, CONSTRUCTION DETAILS AND SUMMARY OF QUANTITIES SHEETS.

DESIGN DESIGNATION

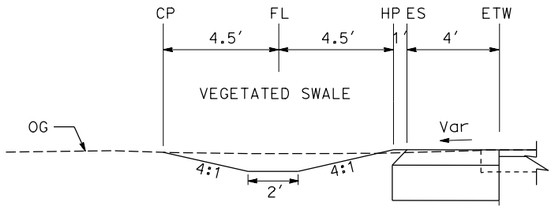
ADT (2018)	5000	D	57%
ADT (2044)	5390	T	1.0%
DHV (2044)	500	V	35 mph
ESAL	183,000	TI_{20}	7.5

PAVEMENT CLIMATE REGION: NORTH COAST

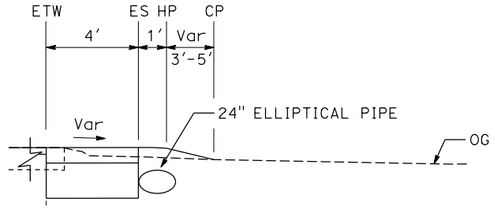
STRUCTURAL SECTIONS:

[1] 0.40′ HMA (TYPE A)
1.00′ CI 2 AB

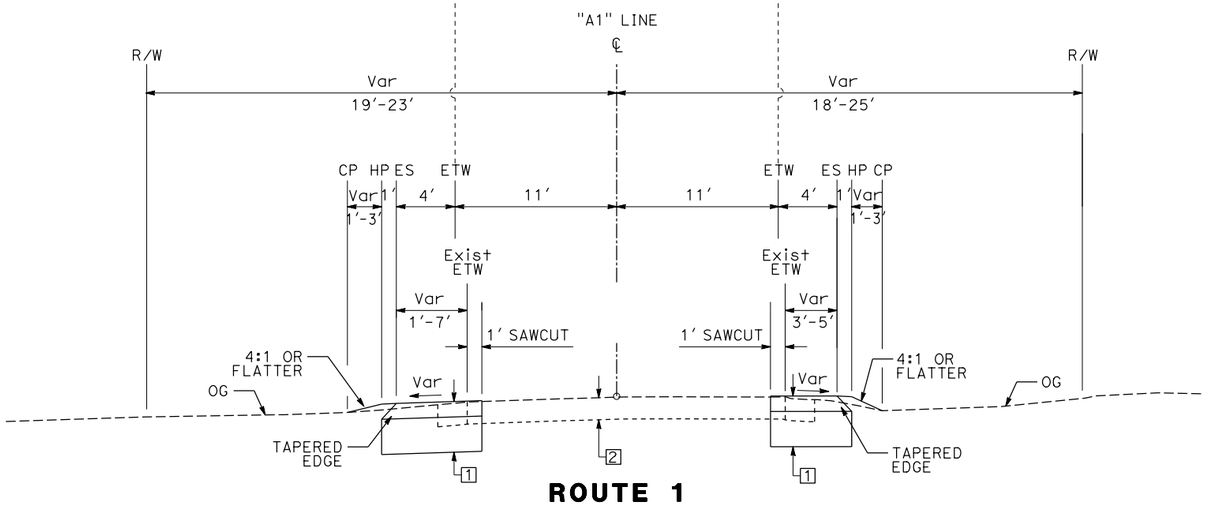
[2] Exist
0.50-0.75′ HMA



"A1" Sta 113+10 TO Sta 115+00



"A1" Sta 115+00 TO Sta 118+64
"A1" Sta 123+37 TO Sta 124+00



ROUTE 1

Sta 111+70 TO Sta 118+64
Sta 123+37 TO Sta 124+16
Sta 128+25 TO Sta 129+15

TYPICAL CROSS SECTIONS

NO SCALE

X-1

LAST REVISION 7-16-19
DATE PLOTTED => 28-AUG-2020
TIME PLOTTED => 07:38

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® **DESIGN**

FUNCTIONAL SUPERVISOR: ELIAS KARAM
CALCULATED-DESIGNED BY: RICHARD LY-LEE
CHECKED BY: SUMANDEEP SUDINI
REVISED BY | DATE REVISED

BORDER LAST REVISED 7/2/2010 | USERNAME => s132285 | DGN FILE => 0117000026ca001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0332 | PROJECT NUMBER & PHASE 0117000026

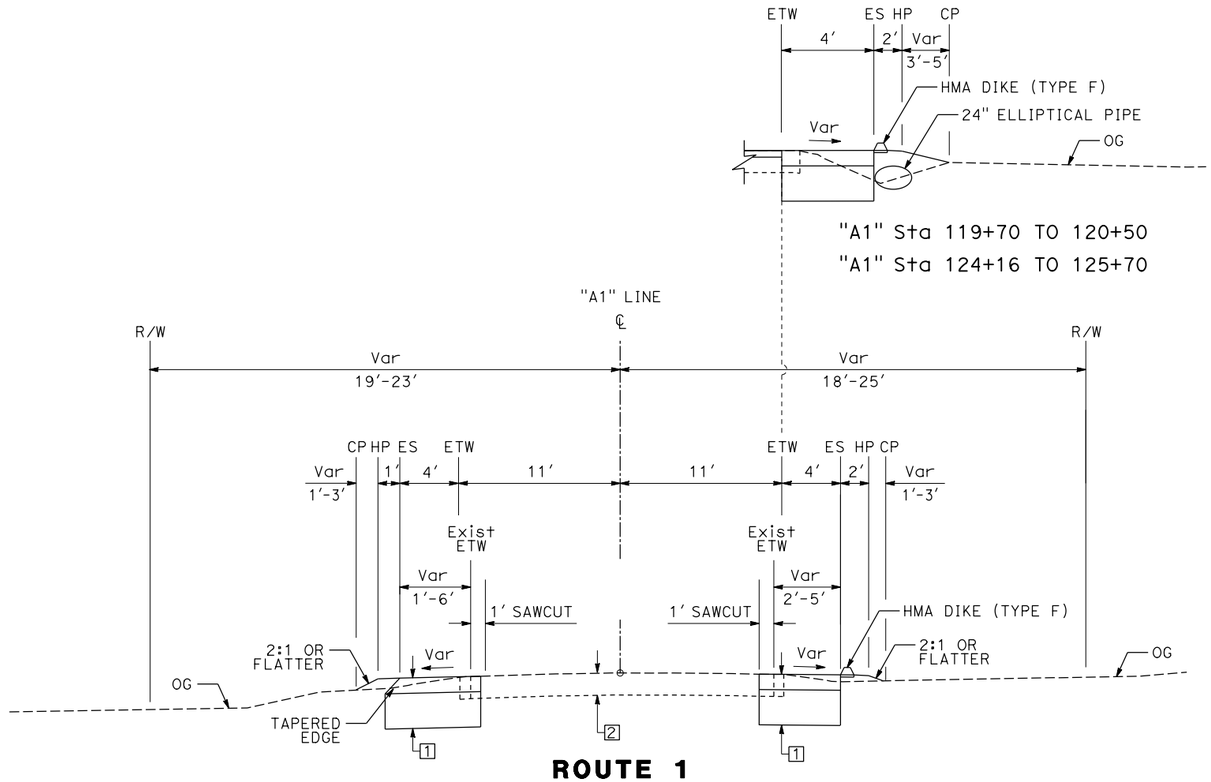
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	1	R65.1,65.5	–	–

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



ROUTE 1

Sta 118+64 TO Sta 120+50
Sta 124+16 TO Sta 125+70

TYPICAL CROSS SECTIONS

NO SCALE

X-2

LAST REVISION 7-16-19
DATE PLOTTED => 28-AUG-2020
TIME PLOTTED => 07:38

CALCULATED-DESIGNED BY	RICHARD LY-LEE	REVISED BY	
CHECKED BY	SUMANDEEP SUDINI	DATE REVISED	
FUNCTIONAL SUPERVISOR	ELIAS KARAM		
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN		

BORDER LAST REVISED 7/2/2010 | USERNAME => s132285 | DGN FILE => 0117000026ca002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0332 | PROJECT NUMBER & PHASE 0117000026

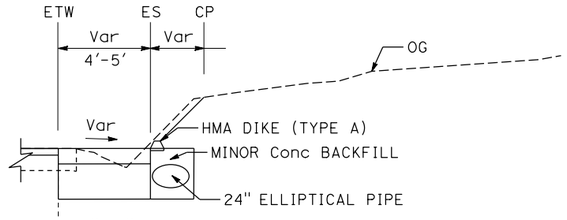
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	1	R65.1,65.5	-	-

REGISTERED CIVIL ENGINEER DATE

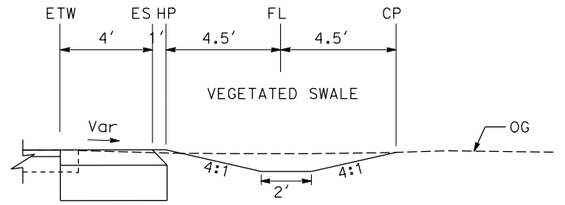
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

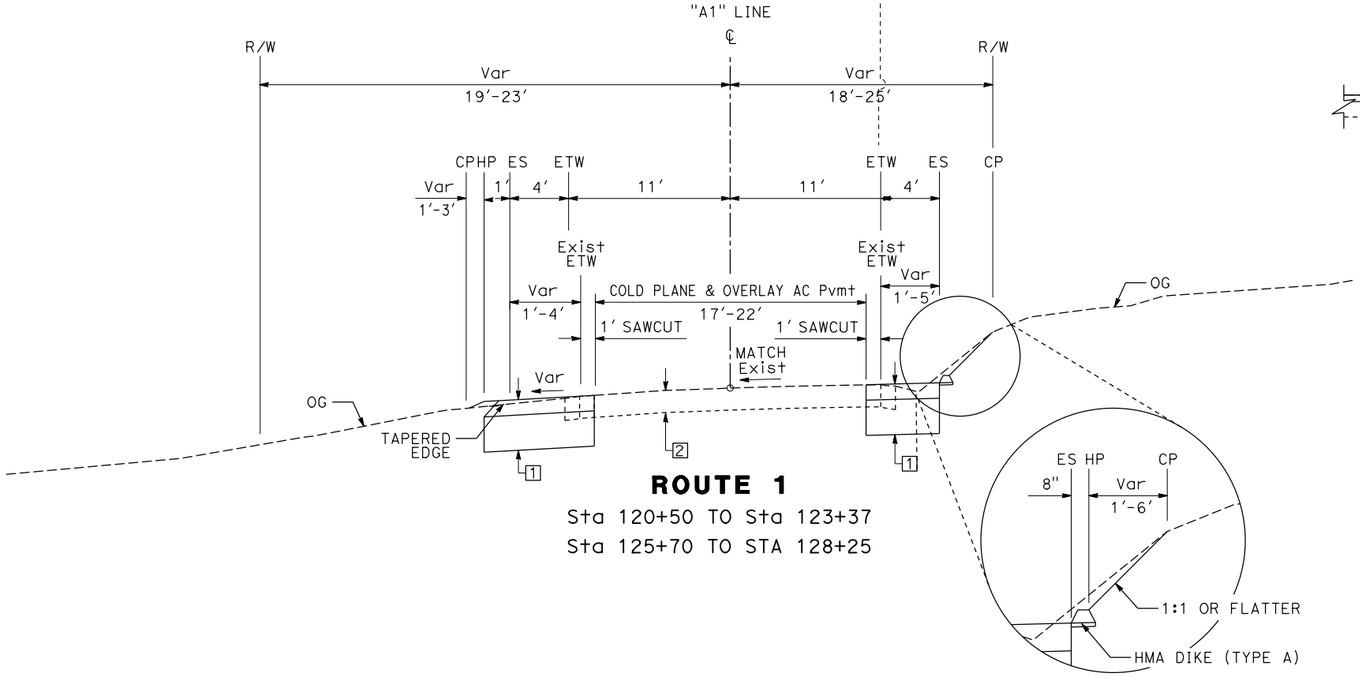
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



"A1" Sta 120+50 TO Sta 123+37



"A1" Sta 128+06.53 TO Sta 129+16.63



ROUTE 1

Sta 120+50 TO Sta 123+37

Sta 125+70 TO STA 128+25

TYPICAL CROSS SECTIONS

NO SCALE

X-3

LAST REVISION 7-16-19

DATE PLOTTED => 28-AUG-2020

TIME PLOTTED => 07:39

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY	DATE REVISED
Caltrans® DESIGN	ELIAS KARAM	CHECKED BY	SUMANDEEP SUDINI	RICHARD LY-LEE

BORDER LAST REVISED 7/2/2010

USERNAME => s132285

DGN FILE => 0117000026ca003.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0332

PROJECT NUMBER & PHASE 0117000026

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND:

- SHOULDER WIDENING
- VEGETATED SWALE
- DRAINAGE PIPE CULVERT
- APPROXIMATE PRESCRIPTIVE R/W
- TEMPORARY CONSTRUCTION EASEMENT
- CUT AND FILL
- DI
- ESL

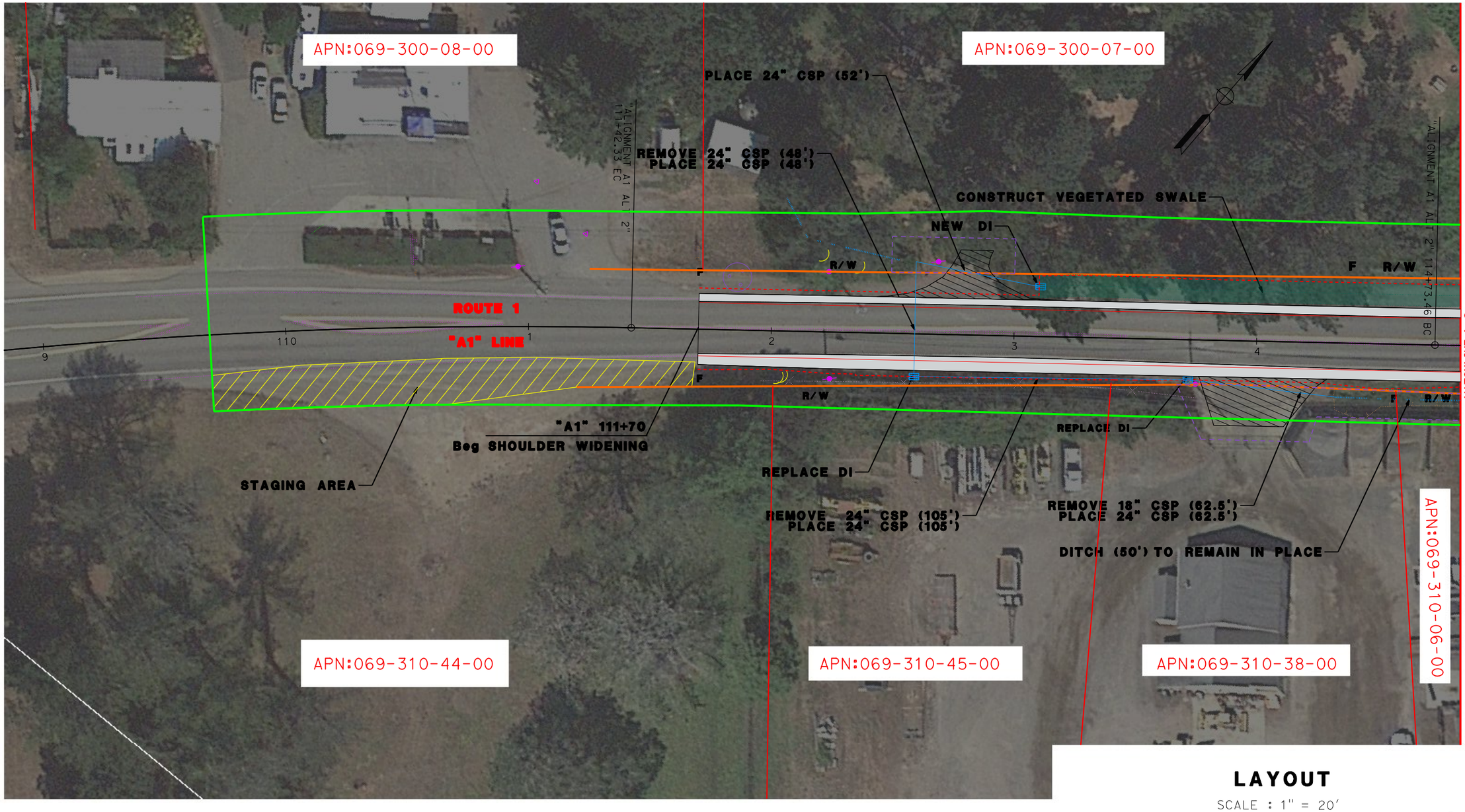
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1	R65.1/65.5		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



LAYOUT

SCALE : 1" = 20'

L-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN

FUNCTIONAL SUPERVISOR: ELIAS KARAM

CALCULATED-DESIGNED BY: RICHARD LY-LEE

CHECKED BY: SUMANDEEP SUDINI

REVISED BY | DATE REVISED

LAST REVISION 00-00-00 | DATE PLOTTED => 26-AUG-2020 | TIME PLOTTED => 09:08

BORDER LAST REVISED 7/2/2010 | USERNAME => s132285 | DGN FILE => 0117000026ea001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0332 | PROJECT NUMBER & PHASE 0117000026

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

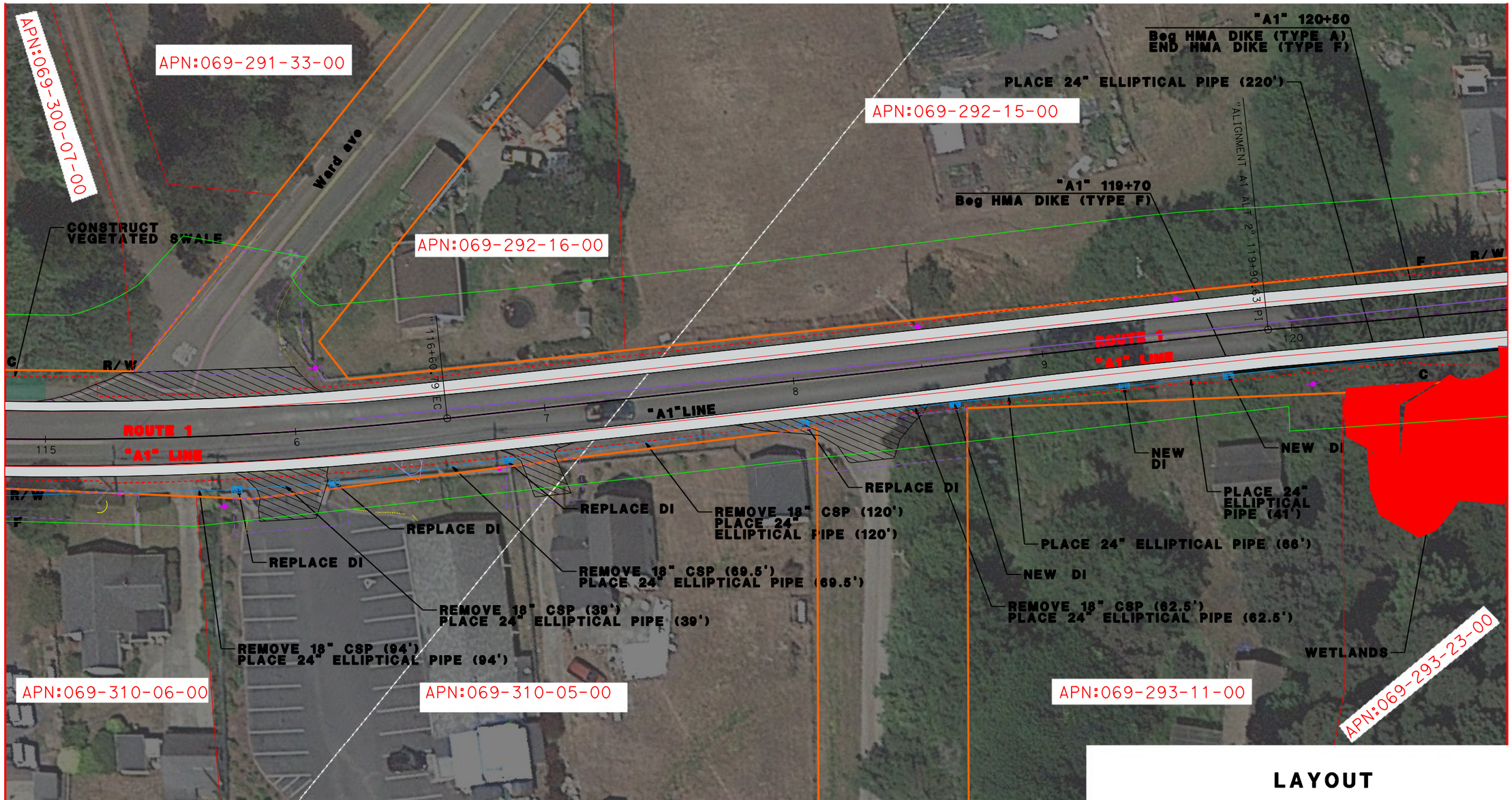
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1	R65.1/65.5		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



LAYOUT

SCALE : 1" = 20'

L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DESIGN

FUNCTIONAL SUPERVISOR: ELIAS KARAM

CALCULATED-DESIGNED BY: RICHARD LY-LEE

CHECKED BY: SUMANDEEP SUDINI

DATE REVISED	REVISED BY

LAST REVISION 00-00-00
DATE PLOTTED => 26-AUG-2020
TIME PLOTTED => 09:32

BORDER LAST REVISED 7/2/2010 | USERNAME => s132285 | DGN FILE => 0117000026ea002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0332 | PROJECT NUMBER & PHASE 0117000026

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

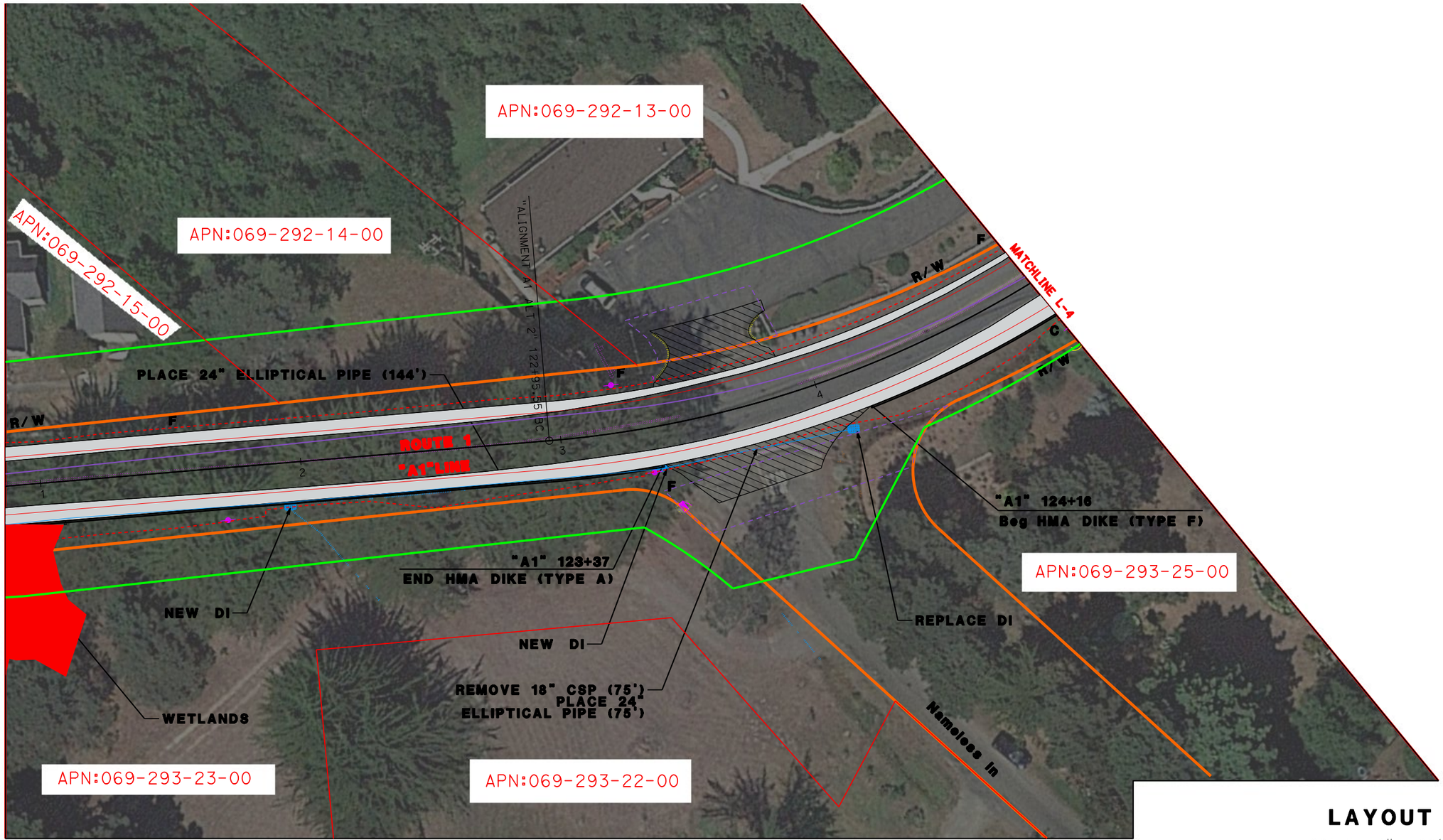
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1	R65.1/65.5		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



LAYOUT

SCALE : 1" = 20'

L-3

RICHARD LY-LEE	SUMANDEEP SUDINI		
CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
FUNCTIONAL SUPERVISOR: ELIAS KARAM			

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — DESIGN — Caltrans

LAST REVISION 00-00-00 — DATE PLOTTED => 26-AUG-2020 — TIME PLOTTED => 09:33

BORDER LAST REVISED 7/2/2010 | USERNAME => s132285 | DGN FILE => 0117000026ea003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0332 | PROJECT NUMBER & PHASE 0117000026

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

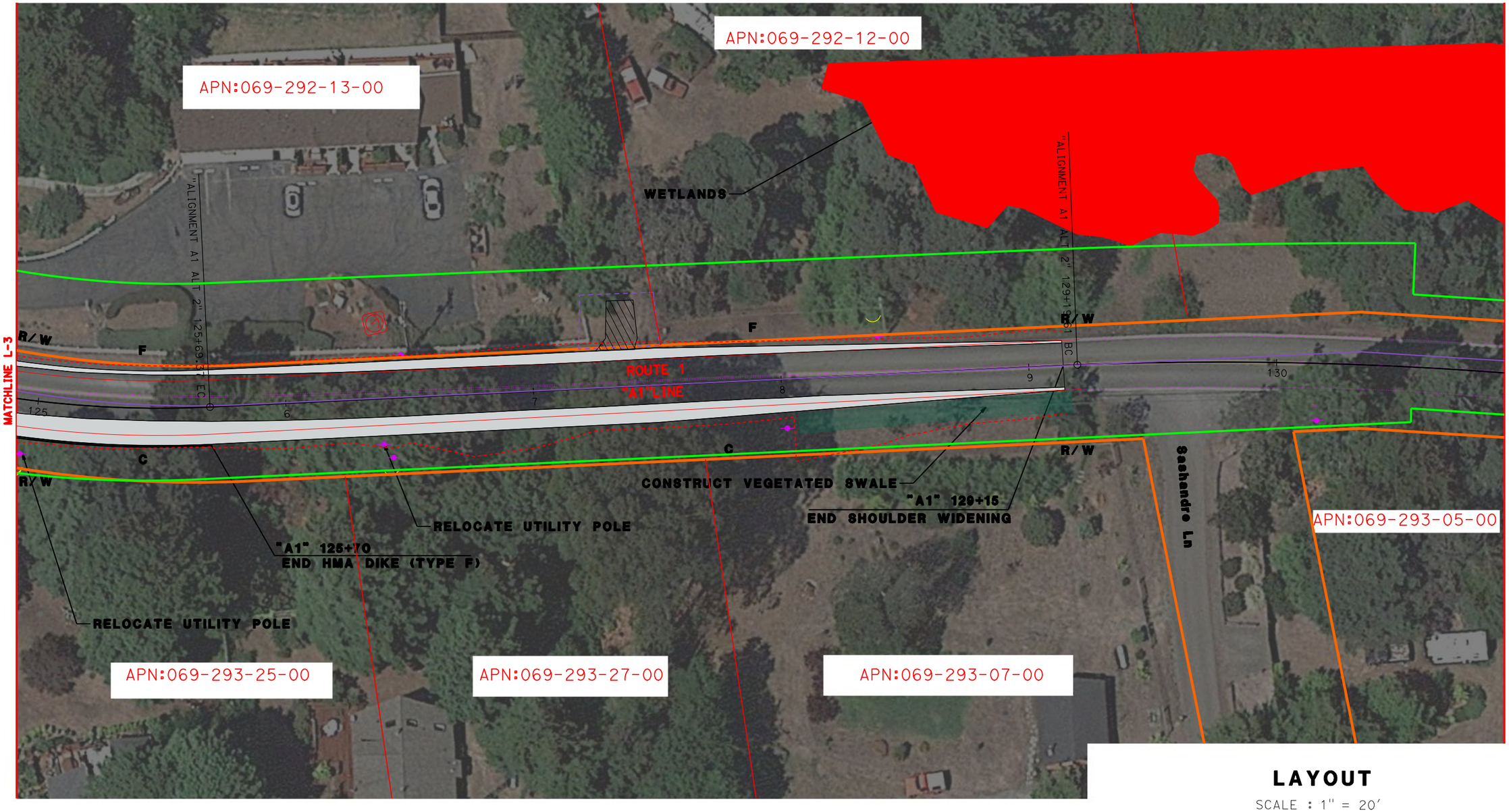
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Men	1	R65.1/65.5		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



LAYOUT

SCALE : 1" = 20'

L-4

RICHARD LY-LEE	SUMANDEEP SUDINI		
CALCULATED-DESIGNED BY	CHECKED BY	REVISED BY	DATE REVISED
FUNCTIONAL SUPERVISOR	ELIAS KARAM		
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN		

LAST REVISION 00-00-00 DATE PLOTTED => 26-AUG-2020 TIME PLOTTED => 10:35

BORDER LAST REVISED 7/2/2010 | USERNAME => s132285 DGN FILE => 0117000026ea004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0332 | PROJECT NUMBER & PHASE 0117000026

Appendix B. Title VI Policy Statement

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

November 2019

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "*No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.*"

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

Appendix C. USFWS, NMFS, CNDDB, CNPS Species Lists

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Arcata Fish And Wildlife Office
1655 Heindon Road
Arcata, CA 95521-4573
Phone: (707) 822-7201 Fax: (707) 822-8411

In Reply Refer To: June 19, 2020
Consultation Code: 08EACT00-2020-SLI-0132
Event Code: 08EACT00-2020-E-00659
Project Name: Cleone Shoulder Widening Project

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arcata Fish And Wildlife Office
1655 Heindon Road
Arcata, CA 95521-4573
(707) 822-7201

Project Summary

Consultation Code: 08EACT00-2020-SLI-0132

Event Code: 08EACT00-2020-E-00659

Project Name: Cleone Shoulder Widening Project

Project Type: TRANSPORTATION

Project Description: Widening the road and its associated shoulders on SR 1 in Mendocino Co. from PM 65.13 to 65.50

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/39.492972572915306N123.78186839403142W

Counties: Mendocino, CA

Endangered Species Act Species

There is a total of 19 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Fisher *Pekania pennanti* Population: West coast DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3651	Threatened
Point Arena Mountain Beaver *Aplodontia rufa nigra* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7727	Endangered

Birds

NAME	STATUS
Marbled Murrelet *Brachyramphus marmoratus* Population: U.S.A. (CA, OR, WA) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/4467	Threatened
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened
Short-tailed Albatross *Phoebastria (=Diomedea) albatrus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/433	Endangered
Western Snowy Plover *Charadrius nivosus nivosus* Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast) There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **proposed** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

NAME	STATUS
Green Sea Turtle *Chelonia mydas* Population: East Pacific DPS No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6199	Threatened
Leatherback Sea Turtle *Dermochelys coriacea* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1493	Endangered

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Tidewater Goby *Eucyclogobius newberryi* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Behren's Silverspot Butterfly *Speyeria zerene behrensii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/900	Endangered
Lotis Blue Butterfly *Lycaeides argyrognomon lotis* There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5174	Endangered

Flowering Plants

NAME	STATUS
Burke's Goldfields *Lasthenia burkei* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4338	Endangered
Contra Costa Goldfields *Lasthenia conjugens* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/7058	Endangered
Howell's Spineflower *Chorizanthe howellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7607	Endangered
Menzies' Wallflower *Erysimum menziesii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2935	Endangered
Monterey Clover *Trifolium trichocalyx* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4282	Endangered
Showy Indian Clover *Trifolium amoenum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6459	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

From: NMFSWCRCA Specieslist - NOAA Service Account
To: Walker, Tracy@DOT
Subject: Re: Official Resource List for Caltrans Cleone Shoulder Widening Project in Mendocino County
Date: Friday, June 19, 2020 4:09:07 PM

Receipt of this message confirms that NMFS has received your email to nmfswcrca.specieslist@noaa.gov. If you are a federal agency (or representative) and have followed the steps outlined on the California Species List Tools web page (http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html), you have generated an official Endangered Species Act species list.

Messages sent to this email address are not responded to directly. For project specific questions, please contact your local NMFS office.

Northern California/Klamath (Arcata) 707-822-7201

North-Central Coast (Santa Rosa) 707-387-0737

Southern California (Long Beach) 562-980-4000

California Central Valley (Sacramento) 916-930-3600

Quad Name **Fort Bragg**
Quad Number **39123-D7**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) - **X**
CC Chinook Salmon ESU (T) - **X**
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) - **X**
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat - **X**
CC Chinook Salmon Critical Habitat - **X**
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat - **X**
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat - **X**

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH - X
Chinook Salmon EFH - X
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans - X

MMPA Pinnipeds - X

Quad Name **Fort Bragg**
Quad Number **39123-D7**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) - **X**
CC Chinook Salmon ESU (T) - **X**
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) - **X**
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) - **X**

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat - **X**
CC Chinook Salmon Critical Habitat - **X**
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat - **X**
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat - **X**

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) - X
Olive Ridley Sea Turtle (T/E) - X
Leatherback Sea Turtle (E) - X
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) - X
Fin Whale (E) - X
Humpback Whale (E) - X
Southern Resident Killer Whale (E) - X
North Pacific Right Whale (E) - X
Sei Whale (E) - X
Sperm Whale (E) - X

ESA Pinnipeds

Guadalupe Fur Seal (T) - X
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH - X
Chinook Salmon EFH - X
Groundfish EFH - X
Coastal Pelagics EFH - X
Highly Migratory Species EFH - X

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans - X

MMPA Pinnipeds - X

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Fort Bragg (3912347) OR Mathison Peak (3912336) OR Noyo Hill (3912346) OR Inglenook (3912357) OR Mendocino (3912337) OR Dutchmans Knoll (3912356))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia umbellata var. breviflora pink sand-verbena	PDNYC010N4	None	None	G4G5T2	S2	1B.1
Accipiter gentilis northern goshawk	ABNKC12060	None	None	G5	S3	SSC
Agrostis blasdalei Blasdale's bent grass	PMPOA04060	None	None	G2	S2	1B.2
Arborimus pomo Sonoma tree vole	AMAFF23030	None	None	G3	S3	SSC
Arctostaphylos nummularia ssp. mendocinoensis pygmy manzanita	PDERI04280	None	None	G3?T1	S1	1B.2
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Ascaphus truei Pacific tailed frog	AAABA01010	None	None	G4	S3S4	SSC
Astragalus agnicidus Humboldt County milk-vetch	PDFAB0F080	None	Endangered	G2	S2	1B.1
Blennosperma nanum var. robustum Point Reyes blennosperma	PDAST1A022	None	Rare	G4T2	S2	1B.2
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
Brachyramphus marmoratus marbled murrelet	ABNNN06010	Threatened	Endangered	G3G4	S1	
Calamagrostis crassiglumis Thurber's reed grass	PMPOA17070	None	None	G3Q	S2	2B.1
Calileptoneta wapiti Mendocino leptonetid spider	ILARAU6040	None	None	G1	S1	
Calystegia purpurata ssp. saxicola coastal bluff morning-glory	PDCON040D2	None	None	G4T2T3	S2S3	1B.2
Campanula californica swamp harebell	PDCAM02060	None	None	G3	S3	1B.2
Carex californica California sedge	PMCYP032D0	None	None	G5	S2	2B.2
Carex lenticularis var. limnophila lagoon sedge	PMCYP037A7	None	None	G5T5	S1	2B.2
Carex livida livid sedge	PMCYP037L0	None	None	G5	SH	2A

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Carex lyngbyei Lyngbye's sedge	PMCYP037Y0	None	None	G5	S3	2B.2
Carex saliniformis deceiving sedge	PMCYP03BY0	None	None	G2	S2	1B.2
Carex viridula ssp. viridula green yellow sedge	PMCYP03EM5	None	None	G5T5	S2	2B.3
Castilleja ambigua var. humboldtiensis Humboldt Bay owl's-clover	PDSCR0D402	None	None	G4T2	S2	1B.2
Castilleja litoralis Oregon coast paintbrush	PDSCR0D012	None	None	G3	S3	2B.2
Castilleja mendocinensis Mendocino Coast paintbrush	PDSCR0D3N0	None	None	G2	S2	1B.2
Charadrius alexandrinus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S2S3	SSC
Chorizanthe howellii Howell's spineflower	PDPGN040C0	Endangered	Threatened	G1	S1	1B.2
Clarkia amoena ssp. whitneyi Whitney's farewell-to-spring	PDONA05025	None	None	G5T1	S1	1B.1
Coastal and Valley Freshwater Marsh Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coastal Brackish Marsh Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
Coelus globosus globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
Collinsia corymbosa round-headed Chinese-houses	PDSCR0H060	None	None	G1	S1	1B.2
Coptis laciniata Oregon goldthread	PDRAN0A020	None	None	G4?	S3?	4.2
Cornus canadensis bunchberry	PDCOR01040	None	None	G5	S2	2B.2
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Cuscuta pacifica var. papillata Mendocino dodder	PDCUS011A2	None	None	G5T1	S1	1B.2
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Entosphenus tridentatus Pacific lamprey	AFBAA02100	None	None	G4	S4	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Erigeron supplex supple daisy	PDAST3M3Z0	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Erysimum concinnum bluff wallflower	PDBRA160E3	None	None	G3	S2	1B.2
Erysimum menziesii Menzies' wallflower	PDBRA160R0	Endangered	Endangered	G1	S1	1B.1
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	SSC
Fen Fen	CTT51200CA	None	None	G2	S1.2	
Fratercula cirrhata tufted puffin	ABNNN12010	None	None	G5	S1S2	SSC
Gilia capitata ssp. pacifica Pacific gilia	PDPLM040B6	None	None	G5T3	S2	1B.2
Gilia millefoliata dark-eyed gilia	PDPLM04130	None	None	G2	S2	1B.2
Grand Fir Forest Grand Fir Forest	CTT82120CA	None	None	G1	S1.1	
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	PDAST4R065	None	None	G5T2	S2	1B.2
Hesperevax sparsiflora var. brevifolia short-leaved evax	PDASTE5011	None	None	G4T3	S2	1B.2
Hesperocyparis pygmaea pygmy cypress	PGCUP04032	None	None	G1	S1	1B.2
Horkelia marinensis Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
Juncus supiniformis hair-leaved rush	PMJUN012R0	None	None	G5	S1	2B.2
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lasthenia californica ssp. bakeri Baker's goldfields	PDAST5L0C4	None	None	G3T1	S1	1B.2
Lasthenia californica ssp. macrantha perennial goldfields	PDAST5L0C5	None	None	G3T2	S2	1B.2
Lathyrus palustris marsh pea	PDFAB250P0	None	None	G5	S2	2B.2
Lilium maritimum coast lily	PMLIL1A0C0	None	None	G2	S2	1B.1
Lycopodium clavatum running-pine	PPLYC01080	None	None	G5	S3	4.1
Mendocino Pygmy Cypress Forest Mendocino Pygmy Cypress Forest	CTT83161CA	None	None	G2	S2.1	
Microseris borealis northern microseris	PDAST6E030	None	None	G5	S1	2B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Mitellastra caulescens leafy-stemmed mitrewort	PDSAX0N020	None	None	G5	S4	4.2
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Noyo intersessa Ten Mile shoulderband	IMGASC5070	None	None	G2	S2	
Oceanodroma homochroa ashy storm-petrel	ABNDC04030	None	None	G2	S2	SSC
Oenothera wolfii Wolf's evening-primrose	PDONA0C1K0	None	None	G2	S1	1B.1
Oncorhynchus kisutch pop. 4 coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	G4	S2?	
Oncorhynchus mykiss irideus pop. 16 steelhead - northern California DPS	AFCHA0209Q	Threatened	None	G5T2T3Q	S2S3	
Packera bolanderi var. bolanderi seacoast ragwort	PDAST8H0H1	None	None	G4T4	S2S3	2B.2
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Phacelia insularis var. continentis North Coast phacelia	PDHYD0C2B1	None	None	G2T2	S2	1B.2
Pinus contorta ssp. bolanderi Bolander's beach pine	PGPIN04081	None	None	G5T2	S2	1B.2
Piperia candida white-flowered rein orchid	PMORC1X050	None	None	G3	S3	1B.2
Plebejus idas lotis lotis blue butterfly	IILEPG5013	Endangered	None	G5TH	SH	
Progne subis purple martin	ABPAU01010	None	None	G5	S3	SSC
Puccinellia pumila dwarf alkali grass	PMPOA531L0	None	None	G4?	SH	2B.2
Ramalina thrausta angel's hair lichen	NLLEC3S340	None	None	G5?	S2S3	2B.1
Rana aurora northern red-legged frog	AAABH01021	None	None	G4	S3	SSC
Rana boylii foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
Rhyacotriton variegatus southern torrent salamander	AAAAJ01020	None	None	G3G4	S2S3	SSC
Rhynchospora alba white beaked-rush	PMCYP0N010	None	None	G5	S2	2B.2
Sanguisorba officinalis great burnet	PDROS1L060	None	None	G5?	S2	2B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sidalcea malachroides maple-leaved checkerbloom	PDMAL110E0	None	None	G3	S3	4.2
Sidalcea malviflora ssp. purpurea purple-stemmed checkerbloom	PDMAL110FL	None	None	G5T1	S1	1B.2
Sphagnum Bog Sphagnum Bog	CTT51110CA	None	None	G3	S1.2	
Taricha rivularis red-bellied newt	AAAAF02020	None	None	G4	S2	SSC
Trifolium trichocalyx Monterey clover	PDFAB402J0	Endangered	Endangered	G1	S1	1B.1
Triquetrella californica coastal triquetrella	NBMUS7S010	None	None	G2	S2	1B.2
Usnea longissima Methuselah's beard lichen	NLLEC5P420	None	None	G4	S4	4.2
Viola palustris alpine marsh violet	PDVIO041G0	None	None	G5	S1S2	2B.2

Record Count: 90

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

70 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads 3912357, 3912356, 3912347, 3912346 3912337 and 3912336;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Abronia umbellata var. breviflora	pink sand-verbena	Nyctaginaceae	perennial herb	Jun-Oct	1B.1	S2	G4G5T2
Agrostis blasdalei	Blasdale's bent grass	Poaceae	perennial rhizomatous herb	May-Jul	1B.2	S2	G2
Angelica lucida	sea-watch	Apiaceae	perennial herb	May-Sep	4.2	S3	G5
Arctostaphylos nummularia ssp. mendocinoensis	pygmy manzanita	Ericaceae	perennial evergreen shrub	Jan	1B.2	S1	G3?T1
Astragalus agnicidus	Humboldt County milk-vetch	Fabaceae	perennial herb	Apr-Sep	1B.1	S2	G2
Blennosperma nanum var. robustum	Point Reyes blennosperma	Asteraceae	annual herb	Feb-Apr	1B.2	S2	G4T2
Calamagrostis bolanderi	Bolander's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	4.2	S4	G4
Calamagrostis crassiglumis	Thurber's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	2B.1	S2	G3Q
Calystegia purpurata ssp. saxicola	coastal bluff morning-glory	Convolvulaceae	perennial herb	(Mar)Apr-Sep	1B.2	S2S3	G4T2T3
Campanula californica	swamp harebell	Campanulaceae	perennial rhizomatous herb	Jun-Oct	1B.2	S3	G3
Carex californica	California sedge	Cyperaceae	perennial rhizomatous	May-Aug	2B.3	S2	G5

			herb				
Carex lenticularis var. limnophila	lagoon sedge	Cyperaceae	perennial herb	Jun-Aug	2B.2	S1	G5T5
Carex livida	livid sedge	Cyperaceae	perennial rhizomatous herb	Jun	2A	SH	G5
Carex lyngbyei	Lyngbye's sedge	Cyperaceae	perennial rhizomatous herb	Apr-Aug	2B.2	S3	G5
Carex saliniformis	deceiving sedge	Cyperaceae	perennial rhizomatous herb	May-Jun(Jul)	1B.2	S2	G2
Carex viridula ssp. viridula	green yellow sedge	Cyperaceae	perennial herb	(Jun)Jul-Sep(Nov)	2B.3	S2	G5T5
Castilleja ambigua var. ambigua	johnny-nip	Orobanchaceae	annual herb (hemiparasitic)	Mar-Aug	4.2	S3S4	G4T4
Castilleja ambigua var. humboldtiensis	Humboldt Bay owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	Apr-Aug	1B.2	S2	G4T2
Castilleja litoralis	Oregon coast paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Jun-Jul	2B.2	S3	G3
Castilleja mendocinensis	Mendocino Coast paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Aug	1B.2	S2	G2
Ceanothus gloriosus var. exaltatus	glory brush	Rhamnaceae	perennial evergreen shrub	Mar-Jun(Aug)	4.3	S4	G4T4
Ceanothus gloriosus var. gloriosus	Point Reyes ceanothus	Rhamnaceae	perennial evergreen shrub	Mar-May	4.3	S4	G4T4
Chorizanthe howellii	Howell's spineflower	Polygonaceae	annual herb	May-Jul	1B.2	S1	G1
Chrysosplenium glechomifolium	Pacific golden saxifrage	Saxifragaceae	perennial herb	Feb-Jun(Jul)	4.3	S3	G5?
Clarkia amoena ssp. whitneyi	Whitney's farewell-to-spring	Onagraceae	annual herb	Jun-Aug	1B.1	S1	G5T1
Collinsia corymbosa	round-headed Chinese-houses	Plantaginaceae	annual herb	Apr-Jun	1B.2	S1	G1
Coptis laciniata	Oregon goldthread	Ranunculaceae	perennial rhizomatous herb	(Feb)Mar-May(Sep-Nov)	4.2	S3?	G4?
Cornus canadensis	bunchberry	Cornaceae	perennial rhizomatous herb	May-Jul	2B.2	S2	G5
Cuscuta pacifica var. papillata	Mendocino dodder	Convolvulaceae	annual vine (parasitic)	(Jun)Jul-Oct	1B.2	S1	G5T1
Erigeron supplex	supple daisy	Asteraceae	perennial herb	May-Jul	1B.2	S2	G2
Erysimum concinnum	bluff wallflower	Brassicaceae	annual / perennial herb	Feb-Jul	1B.2	S2	G3
Erysimum menziesii	Menzies' wallflower	Brassicaceae	perennial herb	Mar-Sep	1B.1	S1	G1
Fritillaria roderickii	Roderick's fritillary	Liliaceae	perennial bulbiferous herb	Mar-May	1B.1	S1	G1Q

Gilia capitata ssp. pacifica	Pacific gilia	Polemoniaceae	annual herb	Apr-Aug	1B.2	S2	G5T3
Gilia millefoliata	dark-eyed gilia	Polemoniaceae	annual herb	Apr-Jul	1B.2	S2	G2
Hemizonia congesta ssp. congesta	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	1B.2	S2	G5T2
Hesperevax sparsiflora var. brevifolia	short-leaved evax	Asteraceae	annual herb	Mar-Jun	1B.2	S2	G4T3
Hesperocyparis pygmaea	pygmy cypress	Cupressaceae	perennial evergreen tree		1B.2	S1	G1
Horkelia marinensis	Point Reyes horkelia	Rosaceae	perennial herb	May-Sep	1B.2	S2	G2
Hosackia gracilis	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	4.2	S3	G3G4
Iris longipetala	coast iris	Iridaceae	perennial rhizomatous herb	Mar-May	4.2	S3	G3
Juncus supiniformis	hair-leaved rush	Juncaceae	perennial rhizomatous herb	Apr-May(Jun-Jul)	2B.2	S1	G5
Lasthenia californica ssp. bakeri	Baker's goldfields	Asteraceae	perennial herb	Apr-Oct	1B.2	S1	G3T1
Lasthenia californica ssp. macrantha	perennial goldfields	Asteraceae	perennial herb	Jan-Nov	1B.2	S2	G3T2
Lathyrus palustris	marsh pea	Fabaceae	perennial herb	Mar-Aug	2B.2	S2	G5
Lilium maritimum	coast lily	Liliaceae	perennial bulbiferous herb	May-Aug	1B.1	S2	G2
Lilium rubescens	redwood lily	Liliaceae	perennial bulbiferous herb	Apr-Aug(Sep)	4.2	S3	G3
Listera cordata	heart-leaved twayblade	Orchidaceae	perennial herb	Feb-Jul	4.2	S4	G5
Lycopodium clavatum	running-pine	Lycopodiaceae	perennial rhizomatous herb	Jun-Aug(Sep)	4.1	S3	G5
Microseris borealis	northern microseris	Asteraceae	perennial herb	Jun-Sep	2B.1	S1	G5
Mitellastra caulescens	leafy-stemmed mitrewort	Saxifragaceae	perennial rhizomatous herb	(Mar)Apr-Oct	4.2	S4	G5
Oenothera wolfii	Wolf's evening-primrose	Onagraceae	perennial herb	May-Oct	1B.1	S1	G2
Packera bolanderi var. bolanderi	seacoast ragwort	Asteraceae	perennial rhizomatous herb	(Jan-Apr)May-Jul(Aug)	2B.2	S2S3	G4T4
Phacelia insularis var. continentis	North Coast phacelia	Hydrophyllaceae	annual herb	Mar-May	1B.2	S2	G2T2
Pinus contorta ssp. bolanderi	Bolander's beach pine	Pinaceae	perennial evergreen tree		1B.2	S2	G5T2
Piperia candida	white-flowered rein orchid	Orchidaceae	perennial herb	(Mar)May-Sep	1B.2	S3	G3
Pityopus californicus	California pinefoot	Ericaceae	perennial herb (achlorophyllous)	(Mar-Apr)May-Aug	4.2	S4	G4G5
Pleuropogon refractus	nodding semaphore grass	Poaceae	perennial rhizomatous	(Mar)Apr-Aug	4.2	S4	G4

			herb				
Puccinellia pumila	dwarf alkali grass	Poaceae	perennial herb	Jul	2B.2	SH	G4?
Ramalina thrausta	angel's hair lichen	Ramalinaceae	fruticose lichen (epiphytic)		2B.1	S2?	G5
Rhynchospora alba	white beaked-rush	Cyperaceae	perennial rhizomatous herb	Jun-Aug	2B.2	S2	G5
Sanguisorba officinalis	great burnet	Rosaceae	perennial rhizomatous herb	Jul-Oct	2B.2	S2	G5?
Sidalcea malachroides	maple-leaved checkerbloom	Malvaceae	perennial herb	(Mar)Apr-Aug	4.2	S3	G3
Sidalcea malviflora ssp. purpurea	purple-stemmed checkerbloom	Malvaceae	perennial rhizomatous herb	May-Jun	1B.2	S1	G5T1
Tiarella trifoliata var. trifoliata	trifoliate laceflower	Saxifragaceae	perennial rhizomatous herb	(May)Jun-Aug	3.2	S2S3	G5T5
Trifolium trichocalyx	Monterey clover	Fabaceae	annual herb	Apr-Jun	1B.1	S1	G1
Triquetrella californica	coastal triquetrella	Pottiaceae	moss		1B.2	S2	G2
Usnea longissima	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		4.2	S4	G4
Veratrum fimbriatum	fringed false-hellebore	Melanthiaceae	perennial herb	Jul-Sep	4.3	S3	G3
Viola palustris	alpine marsh violet	Violaceae	perennial rhizomatous herb	Mar-Aug	2B.2	S1S2	G5

Suggested Citation

California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 19 June 2020].

Search the Inventory
Simple Search
Advanced Search
Glossary

Information
About the Inventory
About the Rare Plant Program
CNPS Home Page
About CNPS
Join CNPS

Contributors
The Calflora Database
The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments
rareplants@cnps.org

Appendix D. SHPO Concurrence Letter

State of California • Natural Resources Agency
Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

August 5, 2020

VIA EMAIL

In reply refer to: FHWA_2020_0702_001

Mr. Timothy Keefe
Caltrans District 1
North Region Environmental
1656 Union Street
Eureka, CA 95502

Subject: Determinations of Eligibility for the Proposed Cleone Shoulder Project on Route 1, Mendocino County, CA

Dear Mr. Keefe:

Caltrans is initiating consultation regarding the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). Caltrans submitted a Historic Property Survey Report (HPSR), Historical Resources Evaluation Report (HRER) and Archaeological Survey Report for the proposed project.

Caltrans and the Federal Highway Administration propose to improve and alter several roadway curves for the purpose of improving the safety of Route 1 in Mendocino County from PM 65.13 to 65.49. This is project is necessary in order to reduce the number and severity of 'run-off-road' type accidents. This would be achieved by widening the shoulders that are currently 1 foot or less, to 4 feet to address the type of accidents most common along this stretch of road. A full project description of the undertaking can be found in the HPSR and its attachments.

Pursuant to Stipulation VIII.C.6 of the PA, Caltrans determined that the following properties are not eligible for the National Register of Historic Places:

- The Cleone Gardens Inn (APN 069-292-13-00) 24600 North Highway 1
- The Nygard House (APN 069-292-16-00) 24500 North Highway 1
- The Hast House (APN 069-310-06-00) 24451 North Highway 1

Based on review of the submitted documentation, I concur.

If you have any questions, please contact Natalie Lindquist with e-mail at natalie.lindquist@parks.ca.gov or Alicia Perez with e-mail at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Appendix E. Botanical Survey Results

Plants Observed During Botanical Surveys Conducted for Project EA 01-0G600

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
tree	*Abies grandis*	grand fir	Yes	
tree	*Acacia sp.*	acacia	No	landscape ornamental
tree	*Agathis sp.*	kauri	No	landscape ornamental
herb	*Agave sp.*	agave	No	landscape ornamental
graminoid	*Agrostis stolonifera*	creeping bent-grass	No	
herb	*Ajuga reptans*	carpet bugle	No	
herb	*Allium triquetrum*	three-cornered leek	No	
tree	*Alnus rubra*	red alder	Yes	
graminoid	*Anthoxanthum occidentale*	California sweet vernal grass	Yes	
graminoid	*Anthoxanthum odoratum*	sweet vernal grass	No	
shrub	*Arctostaphylos columbiana*	hoary manzanita	Yes	
ferns and fern allies	*Athyrium filix-femina var. cyclosorum*	lady fern	Yes	
graminoid	*Avena barbata*	barbed oatgrass	No	
shrub	*Baccharis pilularis subsp. consanguinea*	Coyote brush	yes	
herb	*Barbarea orthoceras*	American yellow-rocket	Yes	

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
herb	*Bellis perennis*	Common daisy	No	
herb	*Bergenia sp.*	bergenia	No	landscape ornamental
tree	*Betula sp.*	birch	No	landscape ornamental
ferns and fern allies	*Blechnum spicant*	Deer fern	yes	
herb	*Borago officinalis*	common borago	No	
graminoid	*Briza maxima*	rattlesnake grass	No	
graminoid	*Briza minor*	little rattlesnake grass	No	
graminoid	*Bromus carinatus*	California brome	Yes	
graminoid	*Bromus diandrus*	ripgut brome	no	
shrub	*Buddleja davidii*	butterfly bush	No	
graminoid	*Calamagrostis sp.*	reed-grass	Yes	
herb	*Cardamine californica*	California milk-maids	Yes	
herb	*Cardamine oligosperma*	little western bittercress	Yes	
herb	*Carduus pycnocephalus*	Italian thistle	No	
graminoid	*Carex gynodynama*	wonder-woman sedge	Yes	
graminoid	*Carex harfordii*	Monterrey sedge	Yes	

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
graminoid	*Carex hassei*	false golden sedge	Yes	
graminoid	*Carex leptopoda*	slender-footed sedge	Yes	
graminoid	*Carex obnupta*	slough sedge	Yes	
graminoid	*Carex subbracteata*	small-bracted sedge	Yes	
herb	*Carpobrotus edulis*	freeway iceplant	No	
shrub	*Ceanothus gloriosus var. gloriosus**	Point Reyes ceanothus	Yes	*CDFW/CNPS special status species (Rank 4.3), but planted in landscape area along
herb	*Cerastium glomeratum*	clammy mouse-eared chickweed	No	
herb	*Cirsium vulgare*	bull thistle	No	
shrub	*Cistus purpureus*	orchid rock-rose	No	landscape ornamental
shrub	*Cistus x pulverulentus 'Sunset'*	magenta rock-rose	No	landscape ornamental
herb	*Claytonia perfoliata subsp. perfoliata*	miner's lettuce	Yes	
shrub	*Coleonema pulchrum*	pink breath of heaven	No	landscape ornamental
herb	*Cordyline banksii*	forest cabbage tree	No	landscape ornamental
graminoid	*Cortaderia jubata*	jubata grass	No	
shrub	*Cotinus coggygria*	smoke tree	No	landscape ornamental
shrub	*Cotoneaster cf. horizontalis*	wall cotoneaster	No	

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
shrub	*Cotoneaster pannosus*	silverleaf cotoneaster	No	
herb	*Crocosmia x. crocosmiifolia*	garden montbretia	No	
tree	*Cycas sp.*	cycad	No	landscape ornamental; possibly other genera in family present within ESL
graminoid	*Cyperus eragrostis*	tall umbrella sedge	Yes	
graminoid	*Dactylis glomerata*	orchard grass	No	
herb	*Delosperma sp.*	garden iceplant	No	landscape ornamental
herb	*Digitalis purpurea*	foxglove	No	
herb	*Echeveria imbricata*	hen and chicks	No	landscape ornamental
graminoid	*Eleocharis macrostachya*	longstem spike-rush	Yes	
herb	*Epilobium ciliatum*	willowherb	Yes	
	Erigeron karvinskianus		No	landscape ornamental
herb	*Erodium cicutarium*	red-stemmed filaree	No	
shrub	*Escallonia rubra*	red claws	No	landscape ornamental
herb	*Eschscholzia californica*	California poppy	Yes	
tree	*Eucalyptus globulus*	blue gum	No	
shrub	*Euphorbia characias*	Mediterranean spurge	No	landscape ornamental

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
herb	*Euphorbia peplus*	petty spurge	No	
Graminoid	*Festuca arundinacea*	tall fescue	No	
Graminoid	*Festuca myuros*	rat-tailed fescue	No	
Graminoid	*Festuca rubra*	red fescue	Yes	
herb	*Fragaria vesca*	woodland strawberry	Yes	
tree	*Frangula purshiana*	cascara	Yes	
tree	*Fraxinus angustifolia*	narrow-leaved ash	No	landscape ornamental
shrub	*Fuchsia magellanica*	fuchsia	No	landscape ornamental
shrub	*Fuchsia regia*	fuchsia	No	landscape ornamental
herb	*Galium aparine*	goose grass	Yes	
herb	*Galium trifidum*	three-petaled bedstraw	Yes	
herb	*Gasteria sp.*	ox-tongue	No	landscape ornamental
shrub	*Gaultheria shallon*	salal	Yes	
herb	*Geranium dissectum*	cut-leaf geranium	No	
herb	*Geranium molle*	dove-footed geranium	No	
herb	*Geranium robertianum*	Robert's herb	No	

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
shrub	*Grevillea sp.*	spider flower	No	landscape ornamental
shrub	*Hedera helix*	English ivy	No	
tree	*Hesperocyparis macrocarpa*	Monterey cypress	No	
graminoid	*Holcus lanatus*	velvet grass	No	
graminoid	*Hordeum murinum subsp. leporinum*	hare barley	No	
herb	*Hypochaeris radicata*	rough cat's-ear	No	
shrub	*Ilex aquifolium*	English holly	No	landscape ornamental
herb	*Iris douglasiana*	Douglas's iris	yes	
graminoid	*Isolepis carinata*	keeled bulrush	Yes	
graminoid	*Isolepis cernua*	low lateral bulrush	Yes	
graminoid	*Juncus breweri*	Brewer's rush	Yes	
graminoid	*Juncus capitatus*	dwarf rush	No	
graminoid	*Juncus effusus*	soft rush	Yes	key to subspecies
graminoid	*Juncus patens*	California gray rush	Yes	
tree	*Juniperus sp.*	juniper	No	landscape ornamental
herb	*Kniphofia uvaria*	red-hot poker	No	landscape ornamental

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
herb	*Lamiastrum galeobdolon*	yellow archangel	No	landscape ornamental
shrub	*Lavandula stoechas*	Spanish lavendar	No	landscape ornamental
shrub	*Leptospermum sp.*	tea tree	No	landscape ornamental
herb	*Leucanthemum maximum*	Shasta daisy	No	landscape ornamental
herb	*Linum bienne*	narrow-leaved flax	No	
tree	*Notholithocarpus densiflorus var. densiflorus*	Tanoak	yes	
herb	*Lithodora diffusa*	heavenly blue	No	landscape ornamental
herb	*Lonicera hispidula*	pink hairy honeysuckle	Yes	
shrub	*Lonicera involucrata var. ledebourii*	twinberry	Yes	
herb	*Lysimachia (Anagallis) arvensis*	scarlet pimpernel	No	
herb	*Lysimachia (Trientalis) latifolia*	Pacific starflower	Yes	
herb	*Lythrum hyssopifolia*	hyssop-leaved lythrum	No	
tree	*Magnolia x soulangeana*	saucer magnolia	No	landscape ornamental
herb	*Maianthemum dilatatum*	two-leaved false-Solomon's-seal	Yes	
herb	*Maianthemum stellatum*	starry false lily-of-the-valley	Yes	
herb	*Malva nicaeensis or parviflora*	mallow	No	

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
herb	*Medicago arabica*	spotted burclover	No	
herb	*Medicago polymorpha*	common burclover	No	
shrub	*Melaleuca (Callistemon) citrina*	lemon bottlebrush	No	landscape ornamental
herb	*Mentha pulegium*	pennyroyal	No	
shrub	*Morella californica*	wax myrtle	Yes	
shrub	*Muehlenbeckia complexa*	mattress vine	No	invasive vine
herb	*Myosotis latifolia*	broadleaved forget-me-not	No	
herb	*Nasturtium officinale*	water cress	Yes	
herb	*Oenanthe sarmentosa*	Pacific water-parsley	Yes	
herb	*Oxalis articulata ssp. rubra*	windowbox wood-sorrel	No	
herb	*Oxalis corniculata*	creeping wood-sorrel	No	
herb	*Oxalis oregana*	redwood sorrel	Yes	
herb	*Oxalis pes-capre*	Bermuda buttercup	No	
herb	*Phormium tenax*	New Zealand flax	No	landscape ornamental; several varieties/forms within ESL
tree	*Picea sitchensis*	Sitka spruce	Yes	
tree	*Pinus contorta subsp. contorta*	beach pine	Yes	

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
tree	*Pinus muricata*	Bishop pine	Yes	
tree	*Pinus radiata*	Monterrey pine	No	landscape ornamental
tree	*Pinus strobus*	eastern white pine	No	landscape ornamental
herb	*Plantago lanceolata*	English plantain	No	
herb	*Plantago subnuda*	tall coast plantain	Yes	
graminoid	*Poa annua*	annual blue grass	No	
graminoid	*Poa pratensis subsp. pratensis*	Kentucky blue grass	No	
ferns and fern allies	*Polystichum munitum*	western sword fern	Yes	
herb	*Prosartes hookeri*	Hooker's fairy-bells	Yes	
herb	*Prunella vulgaris var. vulgaris*	self-heal	No	
tree	*Prunus sp.*	plum	No	landscape ornamental
herb	*Pseudognaphalium luteoalbum*	weedy cudweed	No	
ferns and fern allies	*Pteridium aquilinum var. pubescens*	bracken fern	Yes	
lichen	*Ramalina menziesii*	lace lichen	Yes	State Lichen; on Bishop pine along SB MEN 1 at 24700
herb	*Ranunculus repens*	common creeping buttercup	No	
herb	*Raphanus raphanistrum*	jointed charlock	No	

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
herb	*Raphanus sativus*	radish	No	
shrub	*Rhododendron columbianum*	Western Labrador tea	Yes	
shrub	*Rhododendron macrophyllum*	California rhododendron	Yes	
shrub	*Rhododendron occidentale*	Western azalea	Yes	
shrub	*Romneya coulteri*	Coulter's Matilija poppy	No	landscape ornamental
shrub	*Rosa spp*	rose	No	landscape ornamental
shrub	*Rosmarinus officinalis*	rosemary	No	landscape ornamental
shrub	*Rubus armeniacus*	Himalayan blackberry	No	
shrub	*Rubus parviflorus*	thimbleberry	Yes	
herb	*Rubus ursinus*	California blackberry	Yes	
herb	*Rumex acetosella*	sheep sorrel	No	
herb	*Rumex crispus*	curly dock	No	
shrub	*Salix hookeriana*	Hooker's willow	Yes	
tree	*Salix lasiandra var. lasiandra*	Pacific tree willow/shining willow	Yes	
shrub	*Salix lasiolepis*	arroyo willow	Yes	
shrub	*Salix scouleriana*	Scouler's willow	Yes	

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
graminoid	*Scirpus microcarpus*	small-fruited bulrush	Yes	
herb	*Senecio minimus*	coastal burnweed	No	
herb	*Senecio vulgaris*	common groundsel	No	
tree	*Sequoia sempervirens*	coast redwood	Yes	
herb	*Sisyrinchium californicum*	golden-eyed-grass	Yes	
herb	*Solanum sp.*	nightshade		
herb	*Solidago elongata*	West Coast goldenrod	Yes	
herb	*Soliva sessilis*	common soliva	No	
herb	*Sonchus sp.*	sow-thistle	No	
shrub	*Spiraea douglasii*	Douglas's spiraea	Yes	
herb	*Stachys sp.*	hedgenettle	Yes	
herb	*Stellaria media*	common chickweed	No	
herb	*Symphyotrichum sp.*	aster	Yes	
herb	*Taraxacum officinale*	common dandelion	No	
tree	*Thuja cf. occidentalis*	northern white-cedar	No	landscape ornamental
shrub	*Tibouchina urvilleana*	princess flower	No	landscape ornamental

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
shrub	*Toxicodendron diversilobum*	poison-oak	Yes	
herb	*Trifolium pratense*	red clover	No	
herb	*Trifolium subterraneum*	subterraneum clover	No	
herb	*Triphysaria pusilla*	dwarf owl's-clover	Yes	
herb	*Tropaeolum majus*	garden nasturtium	No	
shrub	*Vaccinium ovatum*	evergreen huckleberry	Yes	
herb	*Verbascum thapsus*	woolly mullein	No	
herb	*Vicia sativa subsp. sativa*	spring vetch	No	
herb	*Vicia sp.*	vetch		
herb	*Vinca major*	periwinkle	No	
herb	*Viola sempervirens*	redwood violet	Yes	
shrub	*Wisteria sinensis*	Chinese wisteria	No	landscape ornamental
herb	*Zantedeschia aethiopica*	calla-lily	No	
shrub	*Watsonia sp.*	African iris	No	
tree	*Notholithocarpus densiflorus*	Tanoak	Yes	
herb	*Luzula sp.*	wood rush		

Habitat	Scientific Name	Common Name	California Native Vegetation (Yes/No)	Notes
herb	*Equisetum telmateia*	giant horsetail	Yes	
herb	*Trifolium campestre*	little hop clover	Yes	
herb	*Spergularia rubra*	purple sand spurry		
herb	*Achillea millefolium*	yarrow	Yes	
herb	*Veronica americana*	American speedwell		
tree	*Pseudotsuga menziesii*	Douglas fir	Yes	
shrub	*Berberis sp.*	oregon grape	Yes	
herb	*Sisyrinchium bellum*	Western blue eyed grass	Yes	

Plant list based on herbarium records listed in the Consortium of California Herbaria (CCH) from Cleone and Fort Bragg.