

Sonoma 1 Culvert Rehabilitation Project (04-1K730) South – Evaluation of Potential Section 4(f) Resources and *De Minimis* Impact Determination

PREPARED FOR: Arnica MacCarthy/Caltrans
Office of Environmental Analysis

PREPARED BY: Loretta Meyer/CH2M

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1. Introduction

This Section 4(f) Evaluation document has been prepared in tandem with the Sonoma 1 Culvert Rehabilitation Project - South Initial Study with Proposed Negative Declaration (Caltrans, 2019a). This technical memorandum provides the documentation to support determinations required to comply with the provisions of 23 United States Code (USC) 138 and 49 USC 303, hereafter referred to as Section 4(f).

This documentation has been prepared in accordance with the legislation established under the United States Department of Transportation Act of 1966 (23 USC 138; 49 USC 303). Additional guidance was obtained from *Federal Highway Administration Technical Advisory T6640.8A* (FHWA, 1987) and the revised *FHWA Section 4(f) Policy Paper* (FHWA, 2012).

1.1 Section 4(f) Overview

Section 4(f), codified in federal law in 49 USC 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.” Section 4(f) protected resources include publicly-owned parks; recreational areas of national, state or local significance; publicly-owned school playgrounds, wildlife, or waterfowl refuges; or lands from a historic site of national, state, or local significance.

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project requiring the use of publicly owned park land, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of a historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- there is no prudent and feasible alternative to using that land; and
- the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

If historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

1.2 Section 4(f) Use Definitions

When a proposed project is adjacent to or on a property protected under Section 4(f), the impacts of the proposed project must be evaluated. Section 4(f) defines the impact level by types of “use.” These “uses” occur when any of the conditions discussed in the following subsections are met.

Permanent/Direct Use

A permanent use of a Section 4(f) resource occurs when property is permanently incorporated into a transportation facility. Permanent use may occur as a result of partial or full acquisition or a permanent easement that allows permanent access onto the property for maintenance or other transportation-related purposes.

Constructive Use

A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource, but the project’s proximity results in impacts so severe that the protected activities, features, or attributes that qualify the property for protection under Section 4(f) are substantially impaired. Substantial impairment occurs only if the protected activities, features, or attributes of the resource are substantially diminished.

Temporary Occupancy

A temporary use of a Section 4(f) resource results when Section 4(f) property is required for project construction-related activities, the property is not permanently incorporated into a transportation facility, and the activity is not considered adverse by the agency with jurisdiction in terms of the preservation purpose of Section 4(f).

Temporary impacts to a Section 4(f) property may trigger the application of Section 4(f). 23 Code of Federal Regulations (CFR) 774.13(d) defines the following five temporary occupation exception criteria that must be met to determine that a temporary occupancy does not rise to the level of permanent/direct or constructive use for the purposes of Section 4(f):

- Duration is temporary (i.e., the occupancy is shorter than the time needed for construction of the project and there is no change in ownership of the property).
- Scope of work is minor (i.e., the nature and magnitude of the changes to the Section 4(f) properties are minimal).
- There are no anticipated permanent adverse physical impacts or permanent interference with the protected activities, features, or attributes of the property.
- The property is restored to the same or better condition that existed prior to the project.
- There is documented agreement from the appropriate federal, state, or local officials exists having jurisdiction over the property regarding the previously listed conditions.

***De minimis* Impact Determinations**

When impacts to a Section 4(f) property are minor, as agreed to by the agency with jurisdiction over that property, Section 4(f) regulations can be satisfied through a *de minimis* determination.

De minimis impact is defined in 23 CFR 774.17 as follows:

- For parks, recreational areas, and wildlife and waterfowl refuges, a *de minimis* impact is one that would not adversely affect the activities, features, or attributes qualifying the property for protection under Section 4(f).

- For historical sites, *de minimis* impact means that Caltrans has determined that, in accordance with 36 CFR 800, no historical property is affected by the project or the project would have “no adverse effect” on the property in question. The SHPO and Advisory Council on Historic Preservation, if involved, must be notified that Caltrans intends to enter a *de minimis* finding for properties where the project results in “no adverse effect.”
- The officials with jurisdiction must concur in writing with a *de minimis* determination. For recreational or refuge properties, concurrence from the officials having jurisdiction over the properties is required. For historical sites, concurrence from the SHPO is required.

2. Project Description

The proposed Project is located along State Route (SR) 1 in Sonoma County, California, from post mile (PM) 30.8 to 40.6 (see Figure 1, Project Location). The project proposes to replace 23 existing damaged or failed culverts between Mill Gulch and 0.5 mile south of Miller Creek. The culverts would be replaced in kind or upgraded to the appropriate size to provide adequate drainage capacity. The area around the culverts that would potentially be impacted by construction activities are called out in Figure 2 (as project study areas).

All 23 culverts would be replaced using open cut construction. Because SR 1 is a two-lane highway with 0 to 1-foot shoulders in the project corridor, closure of one lane of traffic would be necessary during construction. One-way traffic control would be used to divert traffic. Flaggers would be used to stop traffic at either end of the construction area, while portable cones would be used to separate the lane open to traffic from the lane under construction. The project is expected to be built in three stages.

The first stage includes vegetation clearing and grubbing. In the second stage, a trench would be excavated across the closed lane and the portion of the existing pipe located in the closed lane would be replaced. The trench would be backfilled, potentially with rapid-setting slurry cement, and paved. Once completed on one side of SR 1, the same process would occur on the other side with one lane remaining open for traffic. The pipe halves would be joined together in the trench. Excess soil would be off-hauled immediately. Work not completed in a single working day would be covered with steel plates until the next working day.

In the third stage, off-pavement work such as RSP placement, down drain installation, ditch grading, permanent erosion control measures, highway planting, and guard rail replacement would occur. These project elements will incorporate aesthetic treatments and be designed such that they harmonize to the extent possible with the adjacent landscape (e.g., RSP, drainage elements and headwalls would be colored, stained, or treated to blend into their surroundings).

Construction equipment would include, but not be limited to, excavators, paving equipment, small bobcats, skip loaders, cement mixers, flatbed trucks, dump trucks, water trucks, and generators.

Construction would occur between January 2023 and May 2024 and would take approximately 200 work days. Construction restrictions such as limiting construction activities to occur only during daylight hours and work within streams and drainages restricted to the dry season (June 15 to October 15) would be implemented. In addition, vegetation removal would be scheduled to avoid impacts to nesting birds (usually between February 1 to September 30).

The purpose of the project is to preserve the structural integrity of SR 1 within the project corridor to prevent highway failures. The project is needed to replace 23 existing damaged or failed culverts that were determined by the Office of Hydraulics to have deficiencies and require replacement to prevent

further damage and possible failure of the roadway. Addressing these deficiencies would prevent failure of the culverts and undermining of SR 1 and would avoid impacts to the safety of the traveling public.

3. Description of Section 4(f) Resources

As part of this Section 4(f) evaluation, a 0.5-mile radius was developed around the 23 culvert locations to determine if any Section 4(f) resources are located within the project vicinity and if the proposed Project would “use” these properties (see Figure 1). Three public parks, one of which is also a historic resource, are located within this 0.5-mile radius: Salt Point State Park, Stillwater Cove Regional Park, and Fort Ross State Historic Park. No wildlife or waterfowl refuges are located within the 0.5-mile radius of the proposed Project. Table 3-1 lists the seven culvert locations by post mile where construction activities are proposed within 0.5 mile of one of these parks, and whether each work location would “use” the applicable Section 4(f) properties.

Table 3-1: Section 4(f) Resources Located within 0.5-Mile Radius of the Proposed Project and Preliminary Section 4(f) Impact Determination

Section 4(f) Resource and Agency with Jurisdiction	Location (post mile)	Type of Resource	Nature of Proposed Construction Activities	Dimension of “Use” (sq. ft.)	Anticipated Section 4(f) Impact
Fort Ross Historic State Park – California Department of Parks and Recreation and State Historic Preservation Officer	PM 30.81	State Park, Historic Site, and Public Beach	Construct headwall and install RSP	50’ x 25’ (1,250 sq. ft.)	<i>De Minimis</i>
Fort Ross Historic State Park – California Department of Parks and Recreation and State Historic Preservation Officer	PM 31.26	State Park, Historic Site, and Public Beach	Ditch grading	60’ x 10’ (600 sq. ft.)	No Impact
Fort Ross Historic State Park – California Department of Parks and Recreation and State Historic Preservation Officer	PM 31.44	State Park, Historic Site, and Public Beach	Install RSP	50’ x 40’ (2,000 sq. ft.)	<i>De Minimis</i>
Fort Ross Historic State Park – California Department of Parks and Recreation and State Historic Preservation Officer	PM 31.49	State Park, Historic Site, and Public Beach	Re-construct down drains	25’ x 20’ (500 sq. ft.)	<i>De Minimis</i>
Fort Ross Historic State Park – California Department of Parks and Recreation and State Historic Preservation Officer	PM 31.51	State Park, Historic Site, and Public Beach	Re-construct down drains	15’ x 12’ (180 sq. ft.)	<i>De Minimis</i>
Stillwater Cove Regional Park – Sonoma County Regional Parks	PM 37.17	Regional Park and Public Beach	Construct headwall	25/50’ x 100’ (5,000 sq. ft.)	<i>De Minimis</i>
Salt Point State Park – California Department of Parks and Recreation	PM 40.33	State Park	Install RSP	40’ x 20’ (800 sq. ft.)	<i>De Minimis</i>

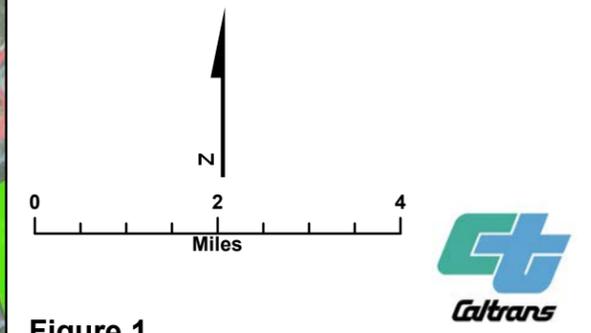
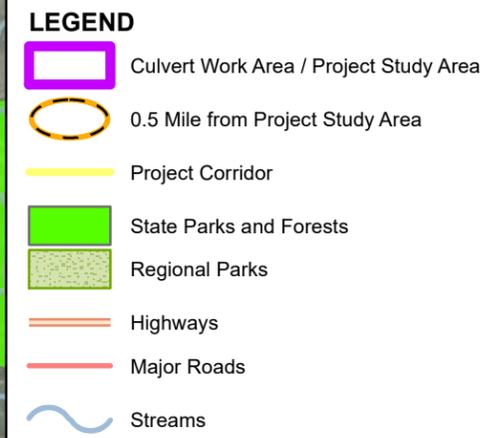
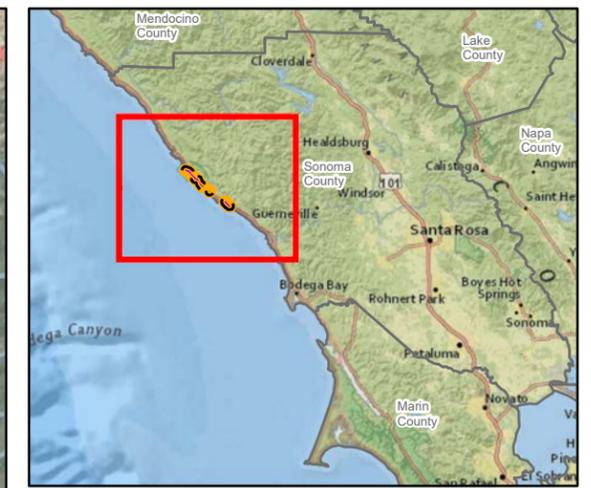
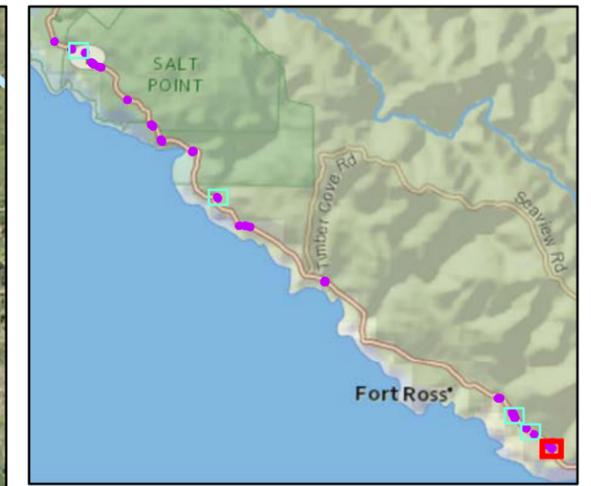
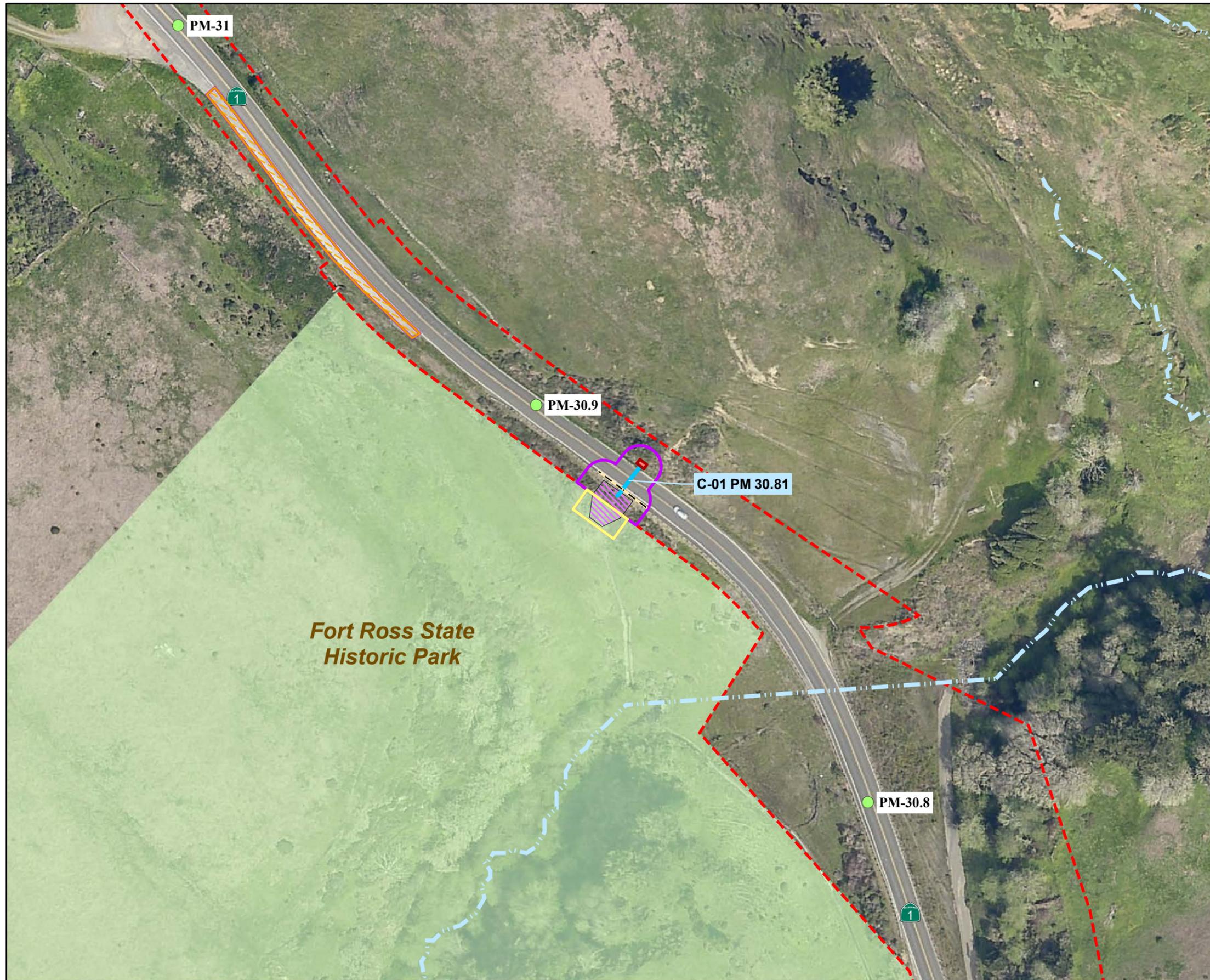


Figure 1
Project Location
 Sonoma 1 Culvert Rehabilitation Project
 EA 1K730, SON-1 Post Mile 30.8 to 40.6
 Sonoma County, California



LEGEND

- Project Study Area / Action Area (2.60 acres)
- Caltrans Right of Way
- Permanent Drainage Easement
- Post Mile
- Streams
- State Parks
- Project Features**
- Replace Culvert
- Replace Guard Rail
- Rock Slope Protection (RSP)(0.085 acre)
- New Headwall (0.003 acre)
- Staging Area (0.129 acre)

Imagery Source:
Sonoma County Spring 2018

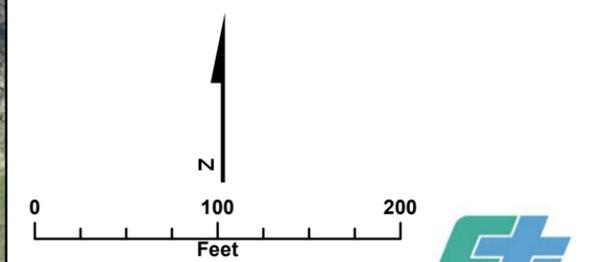
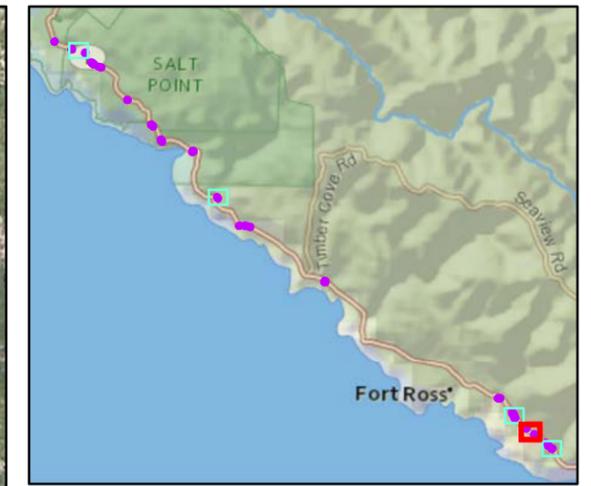
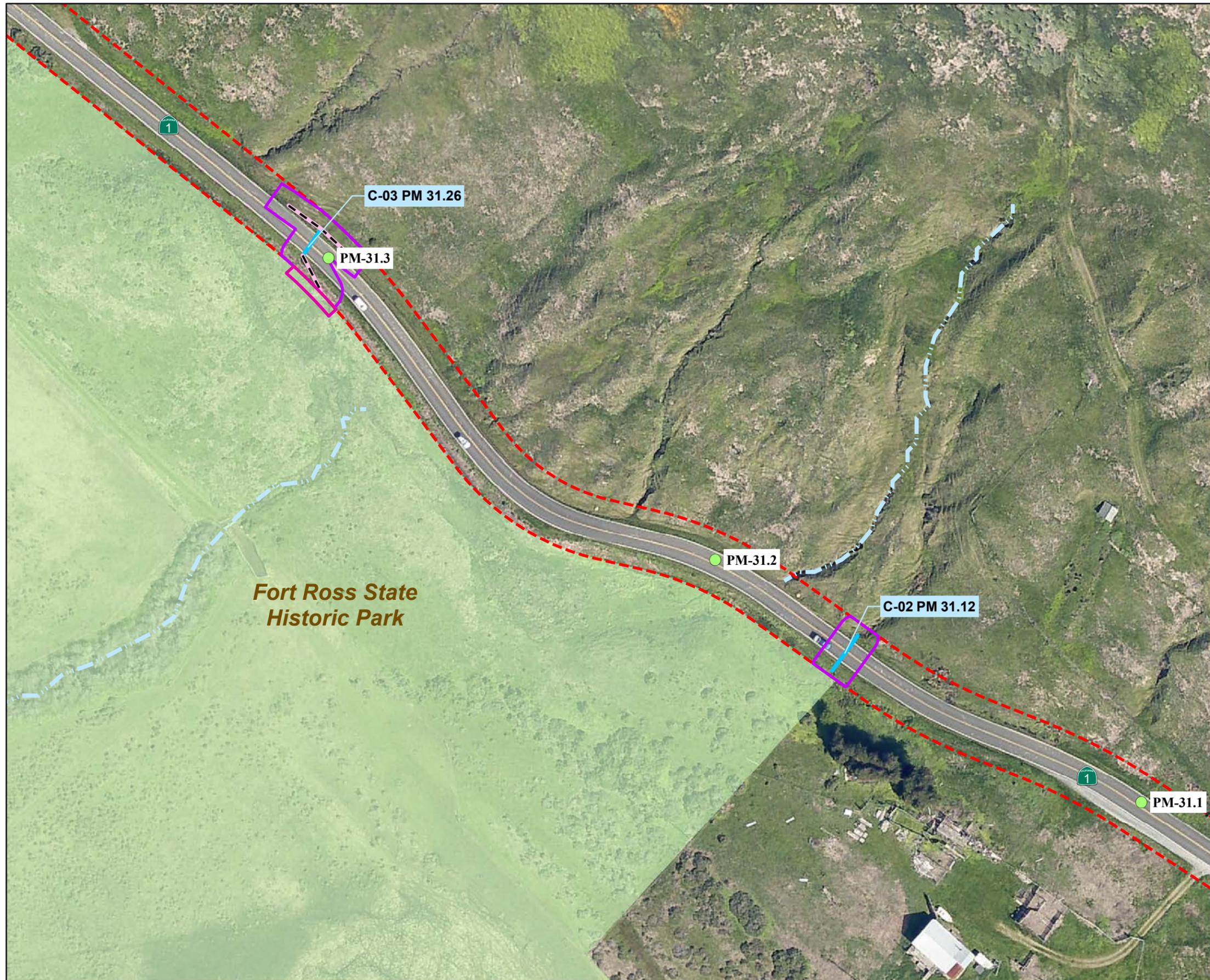


Figure 2
Map 1 of 5
Section 4(f) Resources within 0.5
Mile Radius of Project
Sonoma 1 Culvert Rehabilitation Project
EA 1K730, SON-1 Post Mile 30.8 to 40.6
Sonoma County, California



- LEGEND**
- Project Study Area / Action Area (2.60 acres)
 - Caltrans Right of Way
 - Temporary Construction Easement
 - Post Mile
 - ~ Streams
 - State Parks
- Project Features**
- Replace Culvert
 - Grade Ditch

Imagery Source:
Sonoma County Spring 2018

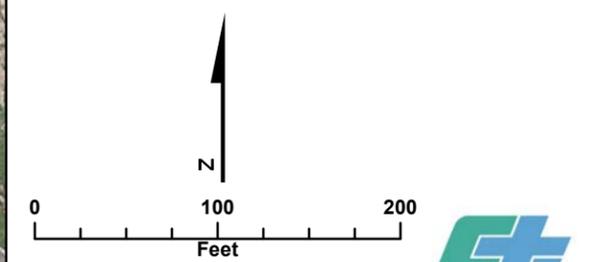
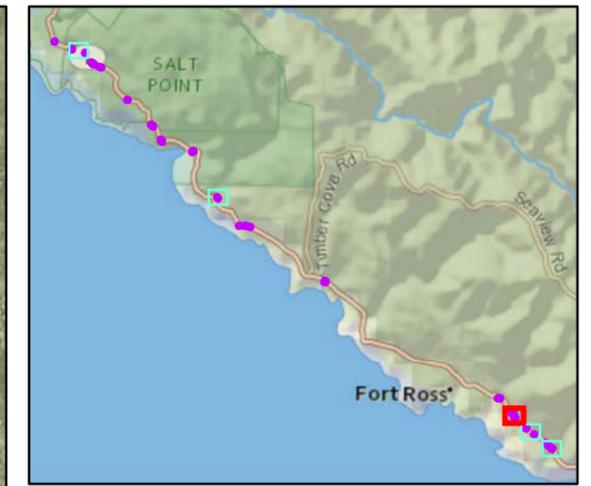
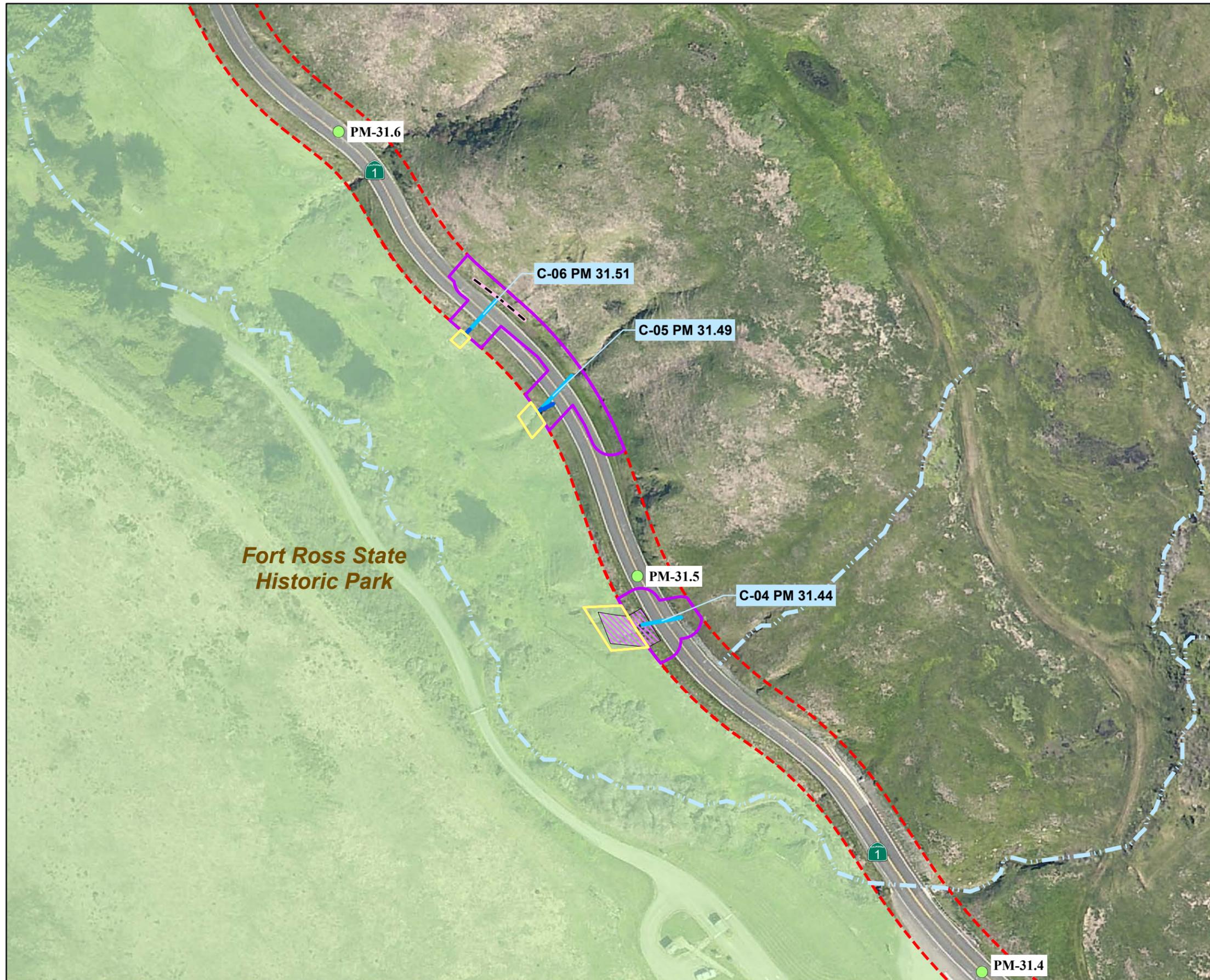


Figure 2
Map 2 of 5
Section 4(f) Resources within 0.5 Mile Radius of Project
Sonoma 1 Culvert Rehabilitation Project
EA 1K730, SON-1 Post Mile 30.8 to 40.6
Sonoma County, California



- LEGEND**
- Project Study Area / Action Area (2.60 acres)
 - Caltrans Right of Way
 - Permanent Drainage Easement
 - Post Mile
 - ~ Streams
 - State Parks
- Project Features**
- Replace Culvert
 - Replace Downdrain
 - Grade Ditch
 - Rock Slope Protection (RSP)(0.085 acre)

Imagery Source:
Sonoma County Spring 2018

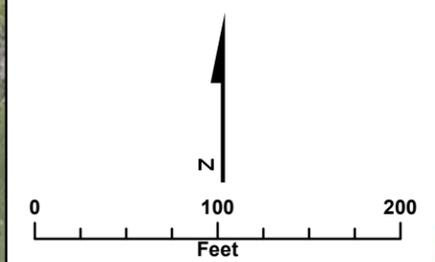
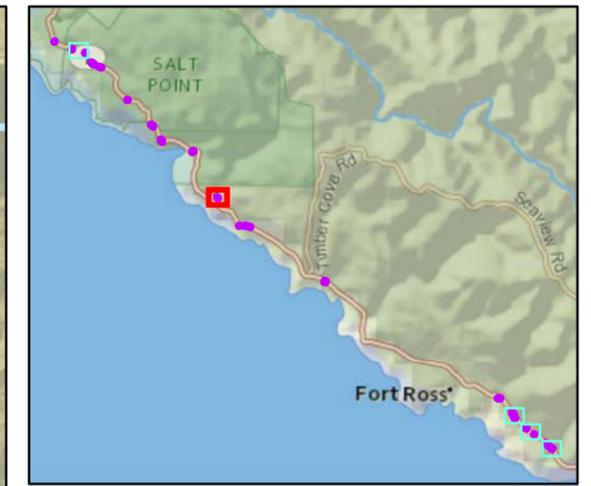
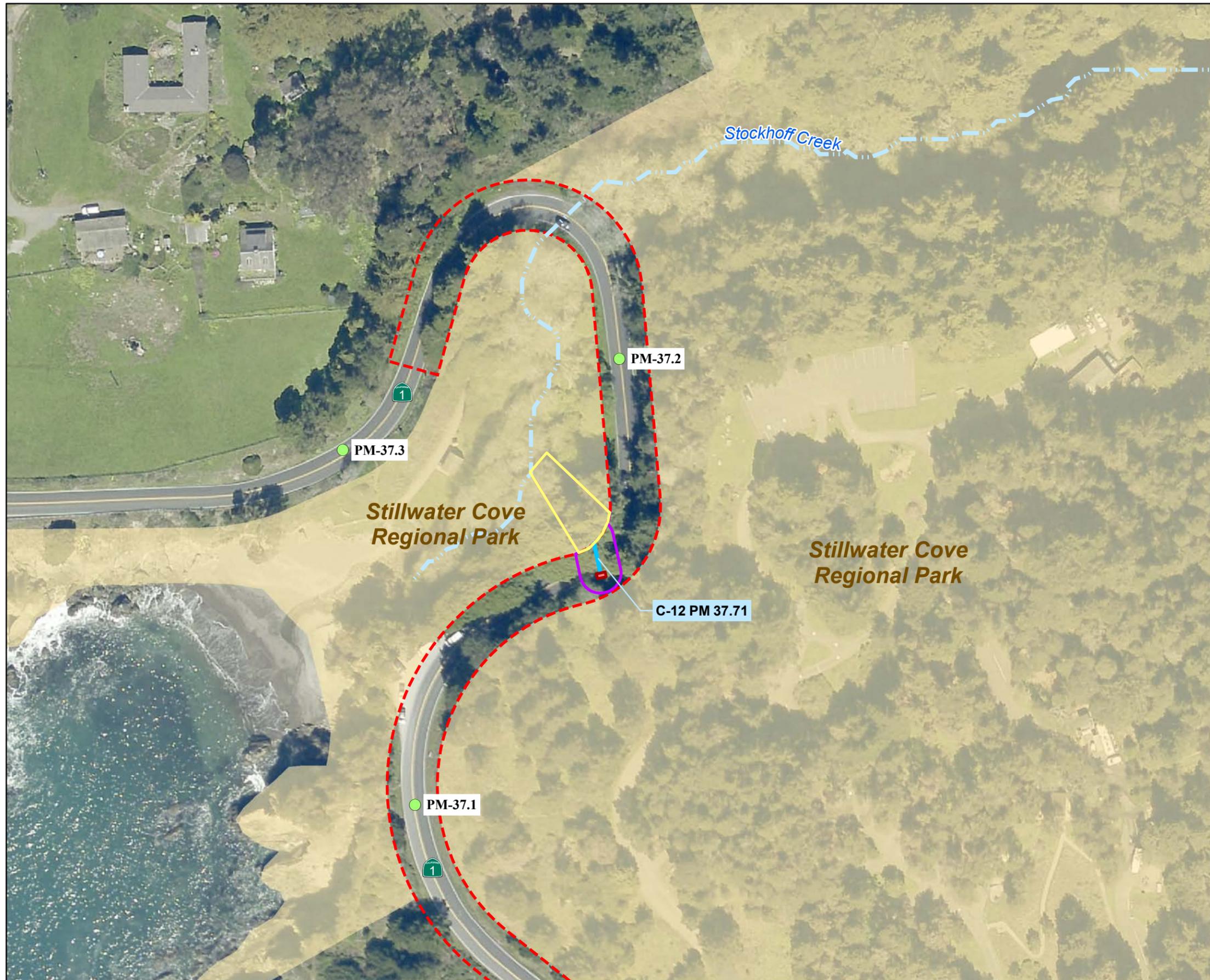


Figure 2
Map 3 of 5
Section 4(f) Resources within 0.5 Mile Radius of Project
Sonoma 1 Culvert Rehabilitation Project
EA 1K730, SON-1 Post Mile 30.8 to 40.6
Sonoma County, California



- LEGEND**
- Project Study Area / Action Area (2.60 acres)
 - Caltrans Right of Way
 - Permanent Drainage Easement
 - Post Mile
 - ~ Streams
 - Sonoma County Regional Parks
- Project Features**
- Replace Culvert
 - New Headwall (0.003 acre)

Imagery Source:
Sonoma County Spring 2018

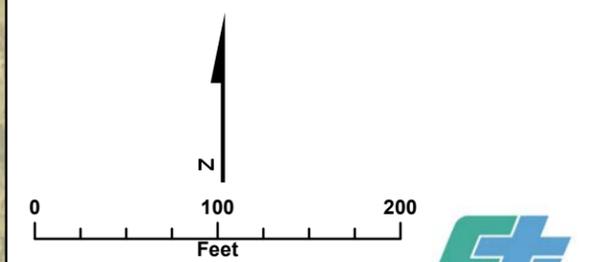
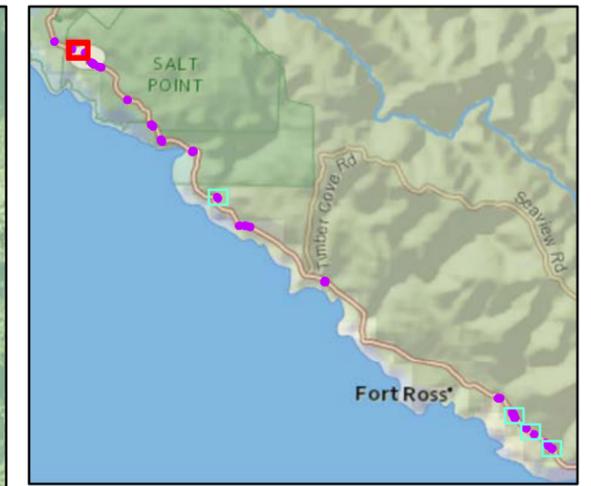
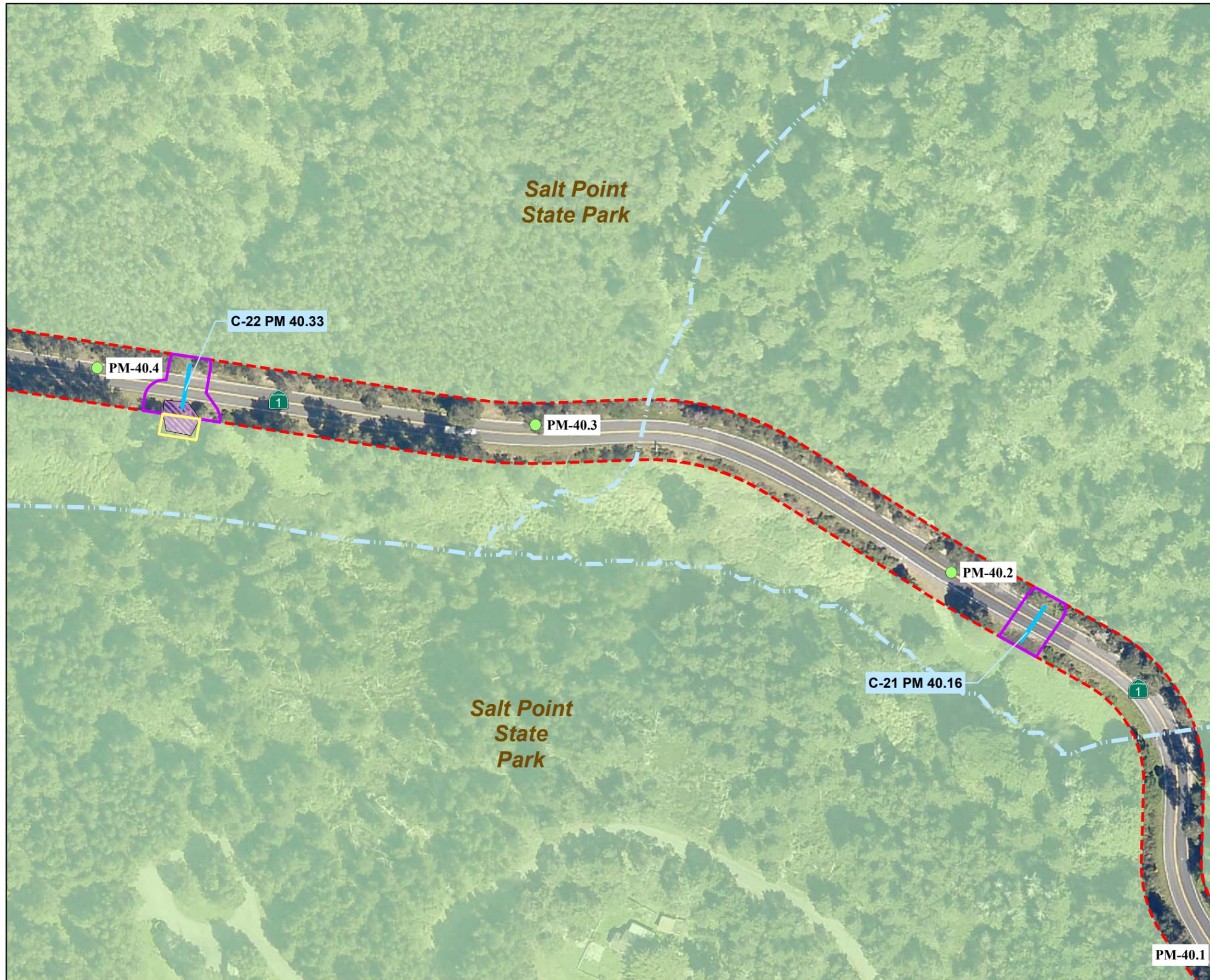


Figure 2
Map 4 of 5
Section 4(f) Resources within 0.5 Mile Radius of Project
Sonoma 1 Culvert Rehabilitation Project
EA 1K730, SON-1 Post Mile 30.8 to 40.6
Sonoma County, California



- LEGEND**
- Project Study Area / Action Area (2.60 acres)
 - Caltrans Right of Way
 - Permanent Drainage Easement
 - Post Mile
 - ~ Streams
 - State Parks
- Project Features**
- Replace Culvert
 - Rock Slope Protection (RSP)(0.085 acre)

Imagery Source:
Sonoma County Spring 2018

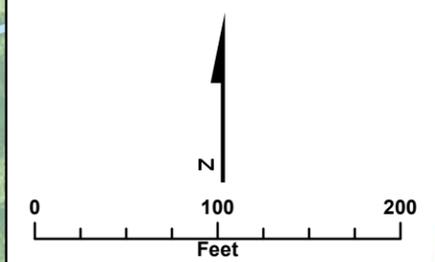


Figure 2
Map 5 of 5
Section 4(f) Resources within 0.5 Mile Radius of Project
Sonoma 1 Culvert Rehabilitation Project
EA 1K730, SON-1 Post Mile 30.8 to 40.6
Sonoma County, California

3.1 Park/Recreation Resources

3.1.1 Fort Ross Historic State Park – California Department of Parks and Recreation

Established in 1906, Fort Ross Historic State Park is one of the oldest state and historic parks in the California Department of Parks and Recreation System. Located on the Sonoma County coast 11 miles northwest of the town of Jenner on SR 1, Fort Ross Historic State Park consists of 3,386 acres and preserves North America’s southernmost Russian settlement. Fort Ross Historic State Park facilities include a visitor center with interpretive exhibits and a research library, a museum bookstore, gardens, the Russian Cemetery, and the Historic Orchard. The former Russian Fort and buildings have sweeping views of the Pacific Ocean, coastal terraces, and densely forested ridges. Recreational activities at Fort Ross Historic State Park include picnicking near the Call Ranch House in the historic compound and at Sandy Cove Beach. Pedestrian trails lead to Sandy Cove Beach or Fort Ross Cove. Fishing, scuba diving, and camping activities are also available to visitors in permitted areas (State Parks, 2019).

3.1.2 Stillwater Cove Regional Park – Sonoma County Regional Parks

Located on the rugged and scenic Sonoma County coast just south of Salt Point State Park, Stillwater Cove Regional Park features ocean access and more than 3 miles of trails. A 1.6-mile loop follows Stockhoff Creek, which supports coho salmon and steelhead trout, and curves through a canyon of towering redwoods filled with ferns, rhododendrons, and other riparian plants, including the swamp harebell and fringed corn lily native only to the Sonoma-Mendocino coasts. There is also a short spur trail that leads to the one-room Fort Ross schoolhouse, which was built at Fort Ross in 1885 and moved to Stillwater Cove Regional Park in 1974 for preservation. Another trail crosses SR 1 to the beach at Stillwater Cove, a popular destination for fishing, abalone diving, ocean kayaking, tidepooling, and picnicking. An inland campground on the east side of SR 1 offers 23 sites, available year-round, and one hike/bike site (Sonoma County Regional Parks, 2019).

3.1.3 Salt Point State Park – California Department of Parks and Recreation

The Salt Point State Park encompasses 6,000 acres along the Sonoma County coast, including grassy terraces that overtop scenic headlands where sandstone cliffs drop abruptly to the Pacific Ocean. Salt Point State Park also includes tidepools and kelp beds abundant with marine life; Salt Point State Park’s offshore waters are protected as one of California’s first underwater parks: Salt Point State Marine Conservation Area.

Bisected by SR 1, this beautiful coastal park, 17 miles north of the mouth of the Russian River and the town of Jenner, also contains two campgrounds. Gerstle Cove Campground, on the ocean side of SR 1, features dramatic sea views, while pine-shaded Woodside Campground, on the more protected east side of SR 1, offers better shelter on windy days. (State Parks, 2019).

Recreational activities at Salt Point State Park include picnicking, hiking, viewing of wildlife and ocean scenic vistas, and where permitted, fishing and camping.

4. Impacts on Section 4(f) and Historic Resources

4.1 Park/Recreation Resources

4.1.1 Fort Ross State Historic Park- California Department of Parks and Recreation

IMPACT: As shown in Figure 2, Maps 1 and 3, the proposed Project would require four permanent drainage easements (PDEs) related to the installation of down drains, ditch drains, headwalls, and RSP. The locations for the installation of these improvements are at PMs 30.81, 31.44, 31.49, and 31.51, all located on the west side of SR 1. The PDEs would encompass 1,250, 2,000, 500, and 180 square feet,

respectively, of Fort Ross State Historic Park. As shown in Figure 2, Map 2, one location at PM 31.26, also on the west side of SR 1, would require a temporary construction easement (TCE) of 600 square feet in order to grade a ditch extending from the culvert placement. All of these areas are located on rocky or steep slopes where no public use or hiking trails of Fort Ross Historic State Park exist. No visibility of this area is available from recreational portions of Fort Ross State Historic Park. Therefore, no recreational amenities are located in these impacted areas and there would be no reduction in recreational uses.

Fort Ross Historic State Park is also a historic resource protected under Section 4(f), as well as Section 106 of the National Historic Preservation Act (NHPA). The impact on this historic resource would be minor and would have no adverse effect on the qualities that qualified Fort Ross Historic State Park for listing on the National Register of Historic Places (NRHP).

PRELIMINARY USE DETERMINATION: Based on the above, although portions of park property would be required for PDEs and TCEs from this protected resource for locations at PMs 30.81, 31.44, 31.49, and 31.51, which is a permanent “use” under Section 4(f), a preliminary determination of *de minimis* impact for the proposed Project is the conclusion of this evaluation. The attributes and features of Fort Ross State Historic Park, such as historic buildings, structures, and other objects, hiking, wildlife viewing, ocean overlooks, picnicking, camping, and beach access that qualify it for Section 4(f) protection would not be adversely impacted. For historical sites, a *de minimis* impact means that Caltrans has determined that, in accordance with 36 CFR 800, the proposed Project would have a finding of “no adverse effect.” The official with jurisdiction (SHPO) has concurred with this *de minimis* determination.

The PDEs associated with the proposed Project would have no impact on the recreational and historic functions of Fort Ross Historic State Park and would not prevent public access to Fort Ross Historic State Park or its beaches. The TCE located at PM 31.26 would not incorporate property from this resource into the rehabilitated SR 1 transportation facility, would have temporary duration, and is minor in scope, and following construction, this site would be restored to its previous condition. Therefore, a preliminary determination of *no impact* for this temporary “use” is the conclusion of this evaluation.

4.1.2 Stillwater Cove Regional Park- Sonoma County Regional Parks

IMPACT: As shown in Figure 2, Map 4, the proposed Project would require a PDE located at PM 37.17 related to the construction of a headwall extending from the new culvert that would encompass up to 5,000 square feet of Stillwater Cove Regional Park. This area is located on a very steep, densely vegetated slope leading to a ravine where no public use or hiking trails of Stillwater Cove Regional Park exist. Since this area is densely forested, no visibility of this area is available from recreational portions of Stillwater Cove Regional Park. Therefore, no recreational amenities are located in the impacted area and there would be no reduction in recreational uses.

PRELIMINARY USE DETERMINATION: Based on the above, although property would be incorporated from this protected resource, which is a permanent “use” under Section 4(f), a preliminary determination of *de minimis* impact for the proposed Project is the conclusion of this evaluation. The attributes and features of Stillwater Cove Regional Park, such as hiking, wildlife viewing, scenic vistas of the Pacific Ocean, picnicking, camping, and beach access that qualify it for Section 4(f) protection would not be adversely impacted. The PDE associated with the proposed Project would have no impact on the recreational functions of Stillwater Cove Regional Park and would not prevent public access to Stillwater Cove Regional Park or its beach.

4.1.3 Salt Point State Park- California Department of Parks and Recreation

IMPACT: As shown in Figure 2, Map 5, the proposed Project would require a PDE located at PM 40.33 related to the installation of a down drain extending from the new culvert and RSP on the west side of SR 1 that would encompass 800 square feet of land on Salt Point State Park. RSP would be installed downstream of the culvert and consist of a layer of rocks used to stabilize slopes and prevent erosion.

This PDE is located on a steep slope where no public use of Salt Point State Park exists. No visibility of this area is available from recreational portions of Salt Point State Park. Therefore, no recreational amenities are located in the impacted area and there would be no reduction in recreational uses.

PRELIMINARY USE DETERMINATION: Based on the above, although park property would be required for a PDE from this resource, which is a permanent “use” under Section 4(f), a preliminary determination of *de minimis* impact for the proposed Project at this location is the conclusion of this evaluation. The attributes and features of Salt Point State Park, such as hiking, wildlife viewing, picnicking, camping, etc., that qualify it for protection under Section 4(f) would not be adversely impacted. The PDE associated with the proposed Project would have no impact on the recreational functions of Salt Point State Park.

4.1.4 Conclusion

In conclusion, implementation of the proposed Project includes seven small encroachments onto portions of park land protected Section 4(f) resources which constitute a “use” of the properties. These “uses” of Section 4(f) properties would not result in any impacts to recreational and historic attributes or features of these park resources. The proposed Project would preserve the structural integrity of SR 1 within the project corridor and prevent localized highway failures. In addition, the proposed Project would help maintain safe, uninterrupted access and connectivity for the public’s continued use of the three public parks, one of which is also a historic resource, evaluated in this document.

5. Measures to Minimize Harm to Section 4(f) Resources

Advanced planning was conducted, and appropriate measures have been incorporated into the proposed Project to minimize impacts to the Section 4(f) resources discussed above. The rehabilitation of culverts along SR 1 in this coastal section of Sonoma County was designed to avoid any adverse impacts to the recreational facilities and parks located along this 10-mile stretch of SR 1.

The following Project Features (PFs) and Avoidance and Minimization Measures (AMMs) have been incorporated into the proposed Project.

5.1 Project Features

Stop Work Upon Discovery of Cultural Materials. If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a Caltrans Professional Qualified Staff (PQS) can assess the nature and significance of the find.

Additional Actions if Cultural Materials Contain Human Remains. If Caltrans Professionally Qualified Staff determines that cultural materials contain human remains, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains. The Caltrans Office of Cultural Resources (OCRS) will contact the Sonoma County Coroner. Pursuant to Public Resources Code (PRC) Section 5097.98; if the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD). The Caltrans OCRS will work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Installation of Rock Slope Protection. At PMs 30.81, 31.44, and 40.33, RSP would be installed to prevent erosion below the culverts.

Headwalls, Down Drains, Drainage Inlets, and Ditch Grading. At PMs 30.81, 31.51, and 37.17, headwalls would be installed at the upstream end of a culvert to prevent separation of culvert joints and prevent infiltration of water into soil surrounding the culvert. To dissipate energy, new or replacement down drains would be installed at many of the culverts. Grading would occur upstream and/or downstream of certain culverts to improve soil infiltration.

Control Measures for Greenhouse Gases. Measures will be implemented to: ensure construction vehicle and equipment maintenance; limit idling of vehicles and equipment onsite; recycle nonhazardous waste and excess material if practicable; and use solar-powered signal boards if feasible.

Construction Site Best Management Practices. To prevent or reduce water quality impacts to the Pacific Ocean and other creeks and tributaries, best management practices (BMPs) will be deployed for sediment control, pH, and material management. BMPs will include measures for soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management, and drainage inlet protection (Caltrans, 2017). These BMPs will include measures such as, but not limited to, temporary concrete washouts, street sweeping, fiber rolls, silt fences, hydraulic mulch, and construction entrances.

Temporary Creek Diversions. Temporary creek diversions will be used for culverts in Waters of the United States (WOTUS), as necessary. The temporary creek diversion may consist of coffer dams and conduit to direct the stream through the existing culverts to the outfall. The choices of a coffer dam are a gravel bag berm, a sheet piling wall, or an AquaDam (a large balloon filled with water).

Noise Best Management Practices. The following BMPs would be implemented during all phases of construction activities to reduce noise:

- Restrict overly loud construction activities to between 7:00 a.m. and 8:00 p.m., where feasible.
- Require construction equipment to conform to Section 14-8.02, Noise Control, of the latest Caltrans Standard Specifications.

Stop Work Upon Discovery of Cultural Materials. If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified Caltrans PQS can assess the significance of the find.

Protect Discovered Tribal Cultural Resources with Temporary Fencing. If any tribal cultural resources are found, these resources will be delineated on the ground with temporary fencing. No construction-related activities or staging are permitted within these areas.

Notify Utility Owner of Construction Schedule to Protect Buried Utilities. Frontier Communications will be notified of construction schedules for proposed culvert rehabilitation work so that they can relocate cable or provide special instructions for cable protection.

5.2 Avoidance and Minimization Measures

Comply with Final Sonoma State Route 1 Repair Guidelines. Project elements will comply with the *Final Sonoma State Route 1 Repair Guidelines* (Guidelines; Caltrans, 2019b). The Guidelines were compiled on an inter-agency basis to provide guidance that integrates and balances safety, mobility, and maintenance goals with environmental values consistent with design best suited for the SR 1 corridor. Components of the Guidelines that apply to this project include: 1) Rock used in RSP will be selected to blend with the native rock and soil; 2) Soil-filled RSP will be utilized so that a blend of local soil and fine compost is placed into rock voids and applied as a topsoil that is seeded with locally sourced native species; 3) Ditches will be designed to blend into the surrounding landscape and concrete and metal facilities will be treated to match the surrounding terrain; and 4) Drainage pipes will be hidden from view where feasible and pipes that cannot be hidden will be colored with earth-tone coating to conceal them.

Apply Context Sensitive Solutions. Project design will follow concepts of context sensitive solutions. Project elements will incorporate aesthetic treatments and be designed such that they harmonize to the extent possible with the adjacent landscape (e.g., drainage elements colored to blend their surroundings). These and other adaptations will help minimize impacts to the visual character of the

area and support visual unity throughout the project area and within the highly scenic coastal highway corridor.

Avoid Unnecessary Removal of Vegetation. Project elements have been adjusted to avoid impacts to visual resources (e.g., existing native trees and vegetation will be further refined during the project design phase). Vegetation removal due to construction will be minimized to the greatest extent feasible.

Protect Vegetation Outside the Limits of Construction. Trees and vegetation outside of the clearing and grubbing limits will be protected from the contractor's operations, equipment, and materials storage.

Revegetate Disturbed Areas Upon Completion of Construction. Following construction, seeding with locally native plants will enhance the visual quality and character of the corridor and help to quickly revegetate any disturbed areas. As appropriate, areas of RSP will be vegetated.

Develop a Transportation Management Plan. To offset temporary disruptions during construction, a traffic management plan (TMP) will be developed by Caltrans with input from the local community during the project design phase. The TMP will include one-way traffic controls, flag workers, and construction phasing to reduce impacts to local residents and maintain access to destinations along SR 1. The TMP will ensure continued project corridor access for emergency services. Thus, police, fire, and medical services would not be adversely affected by the proposed Project. The TMP will include coordination with Sonoma County and public notification in the event of an emergency. The TMP will ensure access to residential driveways that are near construction activities.

6. Coordination

Caltrans has coordinated with CDPR and SCRIP regarding the preliminary *de minimis* and no impact findings made in this document, as well as all advanced project designs with respect to the affected parks in Sonoma County. CDPR and SCRIP have concurred with the preliminary *de minimis* and no impact findings made in this document with respect to their park(s) of jurisdiction (December 12, 2019 and March 3, 2020, respectively) (Attachment A). Prior to finalizing the *de minimis* impact findings made in this document, Caltrans will prepare a public notice and provide the public an opportunity to review and comment on the preliminary *de minimis* impact findings during a 30-day public review period. Possible methods of public involvement include, but are not limited to, newspaper advertisements, notices posted on bulletin boards, and project websites.

A public advertisement published in the Press Democrat on September 14, 2019 provided the public with a Notice of Availability of the Draft Initial Study with Proposed Negative Declaration. In addition, the draft environmental document is electronically accessible on the Caltrans website:
<https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs>.

Caltrans District 4, OCRS technical studies were conducted by Caltrans PQS and carried out in a manner consistent with Caltrans responsibilities under the *January 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, 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*.

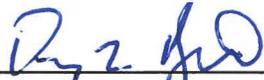
Caltrans consulted with the NAHC and local Native American tribes under Assembly Bill (AB) 52 in July and August of 2018, with follow-up calls conducted on August 22, 2018. The Dry Creek Rancheria of Pomo Indians responded with a request that they be contacted should any archaeological materials be discovered during project construction. The Federated Indians of Graton Rancheria stated that the proposed Project is not within their tribal territory. No other responses were received (Caltrans, 2019c).

7. List of Technical Studies and References

- California Department of Parks and Recreation (State Parks). 2019. [Fort Ross Historic State Park brochure and Salt Point State Park brochure](http://www.parks.ca.gov). <http://www.parks.ca.gov>
- California Department of Transportation (Caltrans). 2017. *Construction Site Best Management Practices (BMP) Manual*. CTSW-RT-17-314.18.1. May. Division of Environmental Analysis, Stormwater Program.
- Caltrans. 2019a. *Sonoma 1 Culvert Rehabilitation Project Initial Study with Proposed Negative Declaration*. June.
- Caltrans. 2019b. *Final Sonoma State Route 1 Repair Guidelines*. Caltrans Department of Transportation District 4. March.
- Caltrans. 2019c. *Completion of Section 106 Compliance for the State Route 1 Culvert Replacement Project in Sonoma County*. Technical Memorandum. File 04-SON-1. EA 04-1K730. District 4 Office of Cultural Resources Studies. Oakland, CA. March 20.
- Federal Highway Administration (FHWA). 1987. *FHWA Technical Advisory T6640.8A*. October 30.
- FHWA. 2012. *Revised FHWA Section 4(f) Policy Paper*. July 20.
- Sonoma County Regional Parks. 2019. [Stillwater Regional Park and Campground Map](https://parks.sonomacounty.ca.gov/Visit/Stillwater-Cove-Regional-Park/). <https://parks.sonomacounty.ca.gov/Visit/Stillwater-Cove-Regional-Park/>.

Attachment A
Agency Concurrence

The California Department of Parks and Recreation, as the agency with jurisdiction over Fort Ross Historic State Park and Salt Point State Park, concurs with the California Department of Transportation Section 4(f) impact determination that the Sonoma 1 Culvert Rehabilitation Project (04-1K730) South will result in a *de minimis* impact on Fort Ross Historic State Park at Post Miles 30.81, 31.44, 31.49, and 31.51 and on Salt Point State Park at Post Mile 40.33. This letter demonstrates compliance with 23 Code of Federal Regulations 774.17.

Signature:  Date: 12/12/19
Name: TERRY L. DENTELS Title: DISTRICT Supt.

Sonoma County Regional Parks, as the agency with jurisdiction over Stillwater Cove Regional Park, concurs with the California Department of Transportation Section 4(f) impact determination that the Sonoma 1 Culvert Rehabilitation Project (04-1K730) South will result in a *de minimis* impact on Stillwater Cove Regional Park at Post 37.17. This letter demonstrates compliance with 23 Code of Federal Regulations 774.17.

Signature: Steve Ehret Date: 3/3/20
Name: Steve Ehret Title: Planning Manager