Requa Road at Hunter Creek Bridge Replacement Project

Initial Study/Mitigated Negative Declaration
Public Draft

August 31, 2021

Prepared for:
County of Del Norte
Community Development Department
981 H Street, Suite 110
Crescent City, CA 95531
(707) 464-7229

Prepared by:
Stantec Consulting Services Inc.
Attn.: Connie MacGregor, Project Manager
376 Hartnell Avenue, Suite B
Redding, California 96002
Phone: (530) 280-8376
Fax: (530) 222-4958
STN #185705102

Project Information

1. Project Title	Requa Road at Hunter Creek Bridge Replacement Project
2. Lead Agency Name and Address	County of Del Norte Community Development Department 981 H Street, Suite 110 Crescent City, CA 95531 (707) 464-7229
3. Contact Person	Rosanna Bower, Assistant County Engineer (707) 464-7229 rbower@co.del-norte.ca.us
4. Project Location	Requa Road at Hunter Creek, located in the unincorporated area of Del Norte County, 2 miles north of Klamath, CA. Approximately 700 feet west of the U.S. Route 101 intersection at Requa Road.
5. Project Sponsor's Name	County of Del Norte
6. General Plan Designation	Coastal Zone Agricultural General (A-20)
7. Zoning	Agricultural General District (A-20)/Floodplain Overlay (FP-2)

8. Description of Project

The County of Del Norte (County) is proposing to improve public safety and increase hydraulic capacity by replacing the existing bridge (No. 01C-0011) on Requa Road over Hunter Creek and construct the necessary roadway approach improvements. The bridge was inspected in 2010 by the California Department of Transportation (Caltrans) and found to be structurally deficient with a sufficiency rating of 43.6, and replacement was determined to be the most cost-effective solution. The project is funded by the Federal Highway Administration through the Highway Bridge Program (HBP) administered by Caltrans Local Assistance. The new bridge structure will be designed in accordance with the Caltrans Bridge Design Specifications (BDS) as well as the current Seismic Design Criteria.

The new bridge would have a length of 210 feet with a 150-foot main span and a 60-foot approach span and would provide two 11-foot traffic lanes and 5-foot shoulder for a clear width of 32 feet, and barrier rails along both sides. The structure type would be a two-span steel girder bridge supported by abutments and a pier on large diameter driven cast-in-steel shell piles. The existing bridge would be removed and disposed of offsite. The bridge deck elevation would be raised in order to have a minimum bridge deck elevation slightly higher than the 100-year Klamath River backwater elevation to minimize future "redo" work and to accommodate future U.S. Route 101 and Requa Road grade raise projects. Stormwater treatment is anticipated at the northeast and northwest areas of the project site and would be installed

during Phase 2 of the proposed project construction. Water from the bridge deck and roadway would be piped to detention basins located within the Hunter Creek floodplain but outside of the normal flow areas.

9. Surrounding Land Uses and Setting

The existing Requa Road serves as the only access to the community of Requa, west of Hunter Creek and U.S. Route 101. The existing roadway serves residences, ranches, campgrounds, and provides access to the coastal trails.

10. Other Public Agencies Whose Approval May Be Required (e.g., permits, financing approval, or participation agreement.)

- National Marine Fisheries Service
- U.S. Army Corps of Engineers
- California Coastal Commission
- California Department of Fish & Wildlife (Region 1)
- California State Regional Water Quality Control Board (North Coast Region)
- County of Del Norte, Community Development Department
- Yurok Tribe

Table of Contents

List of Figures

Acronyms and Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
ADT	average daily traffic
BMP	best management practice
CALFIRE	California Department of Forestry and Fire Protection
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
GHG	greenhouse gas
IS	Initial Study
IS/MND	Initial Study/ Mitigated Negative Declaration
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Declaration
PM	particulate matter
PM_{10}	particulate matter 10 microns in diameter or less
$PM_{2.5}$	particulate matter 2.5 microns in diameter or less
PRC	Public Resources Code
project	Requa Road at Hunter Creek Bridge Replacement Project
ROW	right-of-way
RSP	rock slope protection
SWPPP	Storm Water Pollution Prevention Plan
US 101	U.S. Route 101

1.0 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This document is an Initial Study (IS) that summarizes the technical studies prepared for the proposed Requa Road at Hunter Creek Bridge Replacement Project (project). It includes an evaluation of potential environmental impacts that could result from project implementation and provides justification for a Mitigated Negative Declaration (MND) for the project. This document was prepared in accordance with the current California Environmental Quality Act (CEQA), Public Resources Code (PRC) Section 21000 et seq., and the state CEQA Guidelines (14 California Code of Regulations 1500 et seq.) that require all state and local government agencies to consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. Mitigation measures are proposed to avoid or minimize any significant impacts that are identified.

1.2 LEAD AGENCY

The Lead Agency is the public agency with primary responsibility for carrying out or approving a project. The CEQA Lead Agency will be the County of Del Norte (County) and the project will be funded by the Federal Highway Administration through the Highway Bridge Program (HBP) administered by Caltrans Local Assistance.

1.3 SUPPORTING TECHNICAL STUDIES

The technical studies listed below are available for review at the following location:

County of Del Norte Community Development Department
981 H Street, Suite 110
Crescent City, CA 95531
(707) 464-7229

The following technical studies were conducted for this project and are available to the public upon request (with the exception of the cultural report):

- Cultural Resources Report (This report is confidential and available to qualified readers only.)
- Biological Assessment/Essential Fish Habitat Assessment
- Farmland Impact Assessment
- Final Design Hydraulic Study
- Initial Site Assessment
- Natural Environment Study, including
  - Wetland Delineation Report
  - Delineation of Coastal Act Waters
  - Northern Spotted Owl and Marbled Murrelet Habitat Assessment and Auditory and Visual Disturbance Analysis Report
- Visual Resources Impact Assessment

1.4 DOCUMENT ORGANIZATION

The IS consists of the following chapters:

- **Chapter 1.0 – Introduction** describes the purpose and content of this document.
- **Chapter 2.0 – Project Description** provides a comprehensive description of the project, a tentative schedule, required permit approvals, and project alternatives.
- **Chapter 3.0 – Environmental Impacts and Mitigation Measures** describes the environmental impacts of the project using the CEQA Environmental Checklist. Where appropriate, mitigation measures are provided that would reduce potentially significant impacts to a less-than-significant level.
- **Chapter 4.0 – Determination** provides the environmental determination for the project.
- **Chapter 5.0 – Summary of Mitigation Commitments** provides a comprehensive list of all mitigation measures proposed for the project.
- **Chapter 6.0 – Report Preparation** identifies the individuals responsible for preparation of this document.
- **Chapter 7.0 – References** provides a list of references used to prepare this document.

2.0 PROJECT DESCRIPTION

2.1 LOCATION

The proposed project is located in the unincorporated area of Del Norte County, 2 miles north of the town of Klamath, California and within the boundaries of the Yurok Tribe's Reservation. The Hunter Creek bridge at Requa Road is located approximately 700 feet west of the U.S. Route 101 (US 101) intersection with Requa Road and provides the only access to the remote community of Requa located at the mouth of the Klamath River. Hunter Creek is a direct tributary to the Klamath River approximately 0.5 miles downstream of the project study area. The project area is shown on the *Requa, California* U.S. Geologic Survey 7.5-minute topographic quadrangle in Section 34, Township 13 North, Range 1 East (Figure 1).

The alignment for the proposed new bridge and roadway approaches would largely follow the existing alignment but would be offset slightly to the south (downstream) to permit two-year stage construction while maintaining through traffic. The project area corresponds to an existing Del Norte County right-of-way (ROW) easement through portions of adjacent parcels, although minor additional ROW would be required.

2.2 EXISTING CONDITIONS

Requa Road is classified as a Rural Minor Collector on California Road System maps approved by Caltrans and the Federal Highway Administration. The existing roadway is a two-lane paved road that serves residences, ranches, private and public campgrounds, the Yurok Tribe's boat launch, the historic Requa Inn, the Klamath River Overlook operated by Redwood National and State Parks, and provides access to coastal trails utilized for hiking, fishing, and other recreational opportunities. Requa Road serves as the only access to the community of Requa, west of Hunter Creek and US 101. The current Average Daily Traffic (ADT) is 1,140 vehicles per day with a future ADT of 1,300 ADT (projected to 2028). The design speed west of the bridge is 35 miles per hour (mph) and reduces to 25 mph through reversing curves east of the bridge. The overall roadway alignment is consistent with the generally flat terrain of the Lower Klamath River Valley. The paved roadway approaching the bridge is approximately 22 feet wide and the bridge is located on a tangent segment of the roadway. Just east of the bridge is a pair of reversing curves leading to the US 101 intersection with Requa Road. The bridge grade is relatively flat with the roadway prism elevated approximately 4 feet above the grade of the pasture west of the bridge.

The existing Hunter Creek bridge is comprised of two bridges constructed end to end. The original single-span rigid frame parabolic box girder bridge founded on driven timber piles was constructed in 1949. In 1958, the 1949 structure was lengthened with a two-span continuous reinforced concrete slab bridge founded on driven concrete piles. The existing bridge is approximately 128 feet long and 28 feet wide.

The area around Hunter Creek has a long history of flooding with historic floods in 1955, 1964, 1986, 1994, and 2005. Requa Road is inundated during major storm events which cuts off access for those people on the west side of Hunter Creek. The Yurok Tribe has expressed a desire to raise the grade of Requa Road so that the road remains passable during flood events. The Klamath River also inundates US 101 in the general area during these major events which has triggered Caltrans to consider a project to raise the grade on US 101.

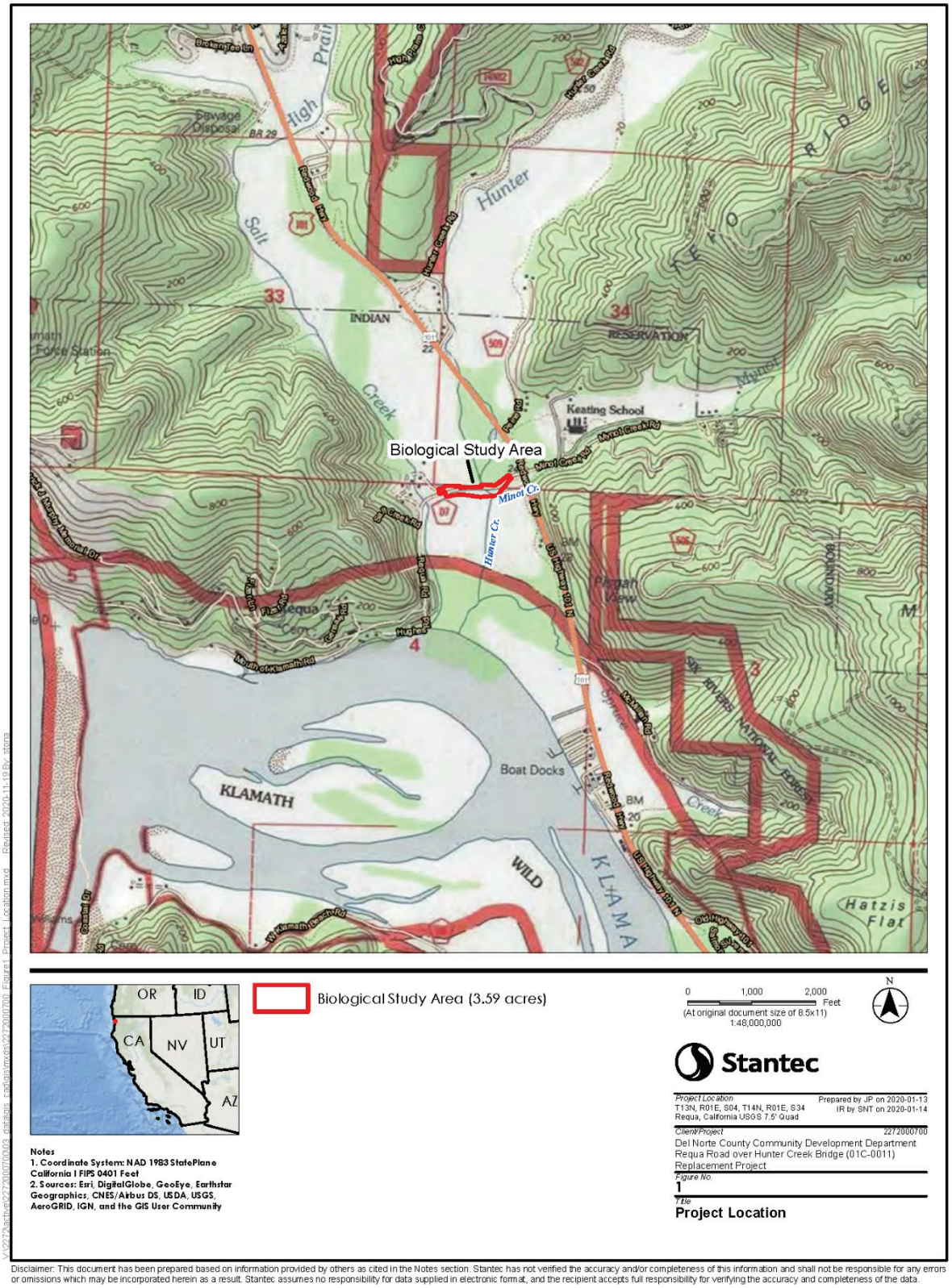

Figure 1. Project Location

2.3 PROJECT PURPOSE AND NEED

The purpose of this project is to replace the existing Hunter Creek Bridge at Requa Road and construct a new bridge to improve public safety and increase hydraulic capacity. The bridge was inspected by Caltrans in 2010 and was found to be structurally deficient and hydraulically inadequate. The existing bridge was determined to be structurally deficient with a sufficiency rating of 43.6, and replacement was determined to be the most cost-effective solution.

2.4 PROPOSED PROJECT

2.4.1 Proposed Project Features

The proposed project layout is shown in Figure 2.

2.4.1.1 Replacement of Existing Bridge with a New Structure

The existing bridge would be replaced with a new structure that would meet current American Association of State Highway and Transportation Officials (AASHTO) requirements, the Hydraulic Design Criteria established by Caltrans, and Caltrans Bridge Design Specifications and Seismic Design Criteria. The new bridge would have a length of 210 feet with a 150-foot man span and a 60-foot approach span. The new bridge would replace the existing bridge on a new, slight downstream alignment. The new bridge would provide two 11-foot traffic lanes and 5-foot shoulders for a clear width of 32 feet, with barrier rails along both sides.

The replacement structure will be designed for the standard and permit live loading as specified in Caltrans Bridge Design Specifications as well as the current Seismic Design Criteria. The main span length has been set based on the Hunter Creek channel width and approach span length has been set to avoid very soft soils and essential fish habitat.

The structure type would be a two-span steel girder bridge supported by abutments and a pier on large diameter driven cast-in-steel shell piles. Large diameter piles are needed due to the deep soft liquefiable soils, approach roadway slope instability during a seismic event, and deep scour potential during a tsunami. The existing bridge would be removed and disposed of offsite. Mainline roadway approach construction would include fills up to 20 feet. Wick drains would be needed to allow for consolidation settlement to occur during the two-season construction and prevent excessive settlements to occur after the project is completed. A gravity retaining wall is needed at the southeast bridge approach fill to reduce impacts to an existing private ground water well. Construction of the bridge abutments would require two excavation areas, each measuring approximately 30 feet long by 12 feet wide by 10 feet deep. It was determined by the County, and concurred by Caltrans, that the design of the Hunter Creek Bridge Project should accommodate future US 101 and Requa Road grade raise projects, to minimize future “redo” work. The Hydraulic Design Criteria established in the Caltrans Local Procedures Manual prescribe that the facility be capable of conveying the base or 100-year flood (Q100) and pass the 50-year flood (Q50) “without causing objectionable backwater, excessive flow velocities or encroaching on through traffic lanes.”

The County, in conjunction with Caltrans, has elected to set the minimum bridge deck elevation slightly higher than the 100-year Klamath River backwater elevation. The soffit elevation would be set to convey the Hunter Creek 100-year flood and would pass the Hunter Creek 50-year flood with adequate freeboard. The structure can also be raised in the future to accommodate future sea level rise. The project will be designed to accommodate tsunami loading as defined by Caltrans.

2.4.1.2 Stormwater Facilities

Storm water treatment is anticipated at the northeast and northwest areas of the project site and will be installed in Phase 2 (Season 2). Water from the bridge deck and roadway will be piped to detention basins located within the Hunter Creek flood plain but outside of the normal flow areas. The segment of Requa Road that would be decommissioned north of the new bridge and realigned road may be retained all or in part for stormwater detention.

2.4.1.3 Right of Way

Del Norte County has 40 feet of ROW along each side of the centerline of Requa Road westerly from the existing easterly abutment. Caltrans owns the ROW east of the easterly abutment. Temporary and permanent ROW would be required both west and east of the existing bridge, Additionally, an encroachment permit from Caltrans would be required prior to construction.

2.4.1.4 Scour Protection, Rock Slope Protections, and Walls

Scour protection of the abutments from Hunter Creek and tsunami flows will be required and is expected to consist of steel sheet piles placed front of each abutment. Rock slope protection (RSP) is expected to consist of 1/4-ton rock. The RSP would have a minimum thickness of 3 feet 4 inches laid over a 1 foot 3-inch-thick No. 2 Backing layer with RSP fabric underneath. The perimeter depth of the RSP key would be approximately 6 feet and would slope back to the bottom of the abutment front footing face. Willow cuttings and other riparian hardwood trees (e.g., black cottonwood) would be incorporated into the RSP and at the Minot Creek scour hole near the stock trail to provide for revegetation of lost riparian habitat and where existing roadway would be removed. Installation would occur while the creek is low and would consist of installing a barrier around the excavation area, installing the RSP and willows, and removing the barrier.

In-stream construction activities would be limited based only on the need to remove the existing bridge and bridge supports and construction of the RSP. A clear water diversion consisting of pipes with protective covers and tarps would be installed prior to bridge removal. The existing bridge would be broken up with a jackhammer mounted on an excavator (hoe-ram) and the debris would fall onto the protective cover and removed. The piers would be broken down and removed in a similar way. The piles would be removed at least 3 feet below the streambed elevation.

The County will work with the Yurok Tribe to define the visual details of the wall in the final design phase. Several wall types are being considered: a mechanically stabilized earth wall or a gravity wall. The gravity wall type—a Hilfiker wire basket or crib wall—is preferred since it would allow more flexibility.

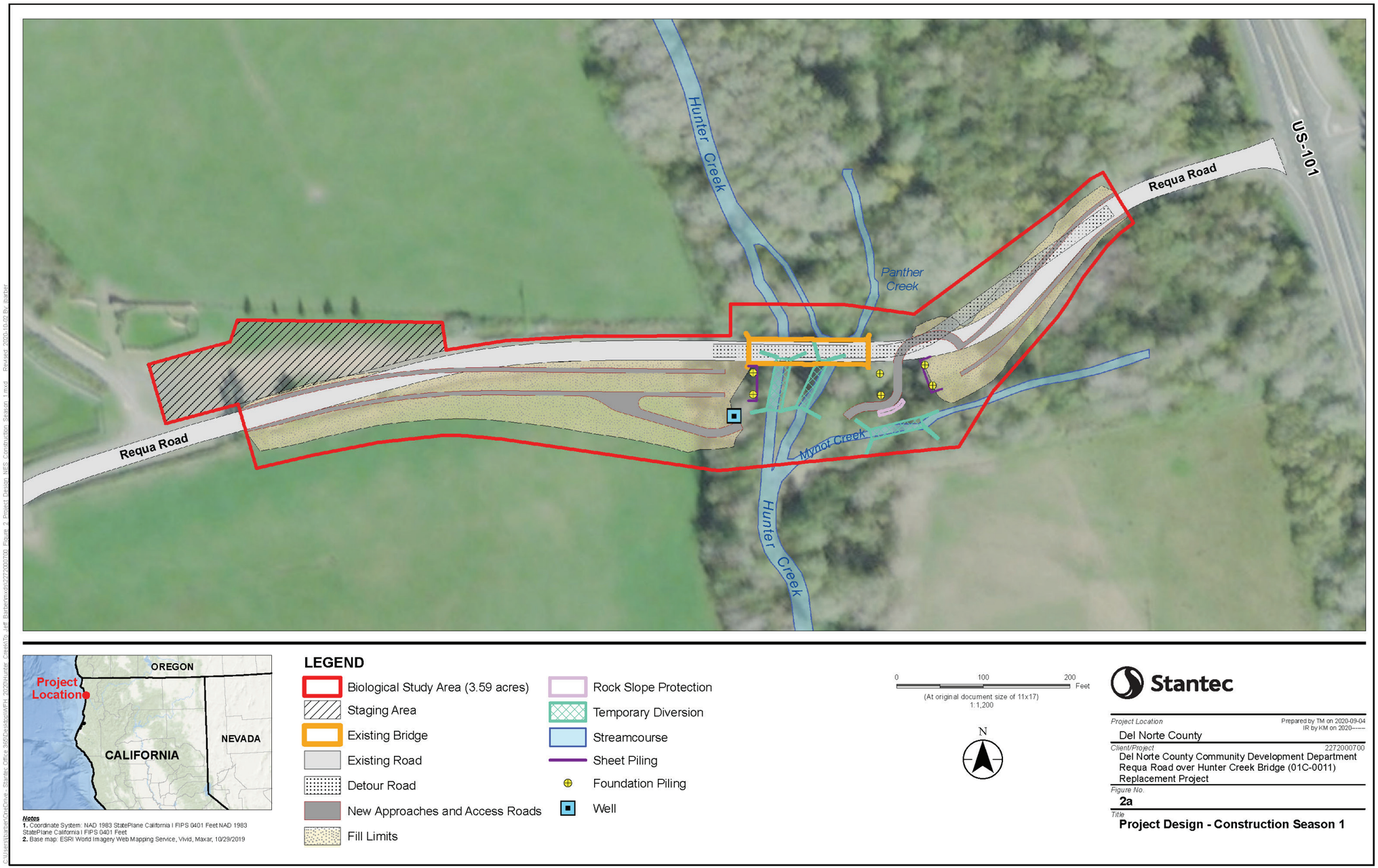

Figure 2a. Project Design – Construction Season 1

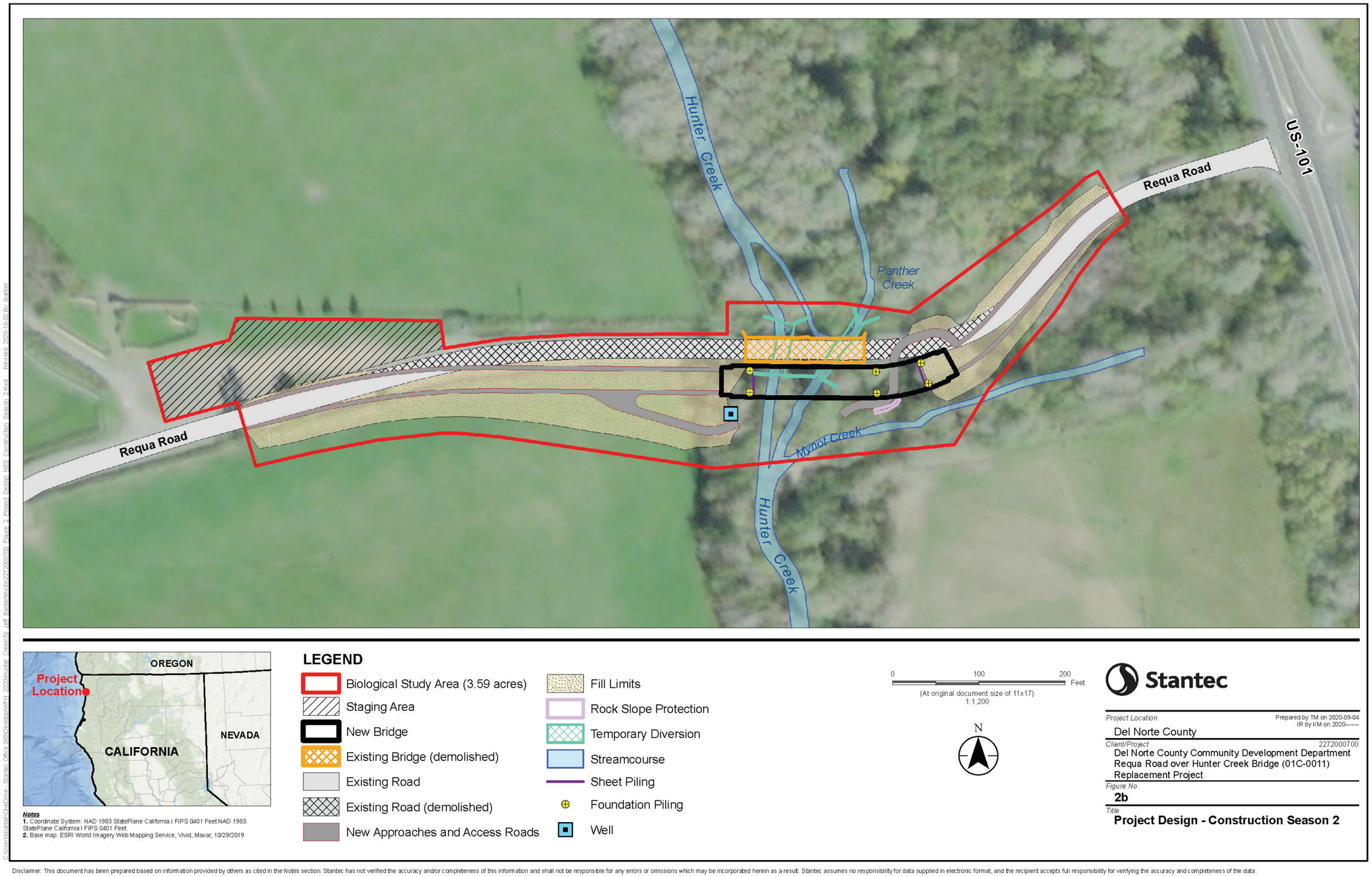

Figure 2b. Project Design – Construction Season 2

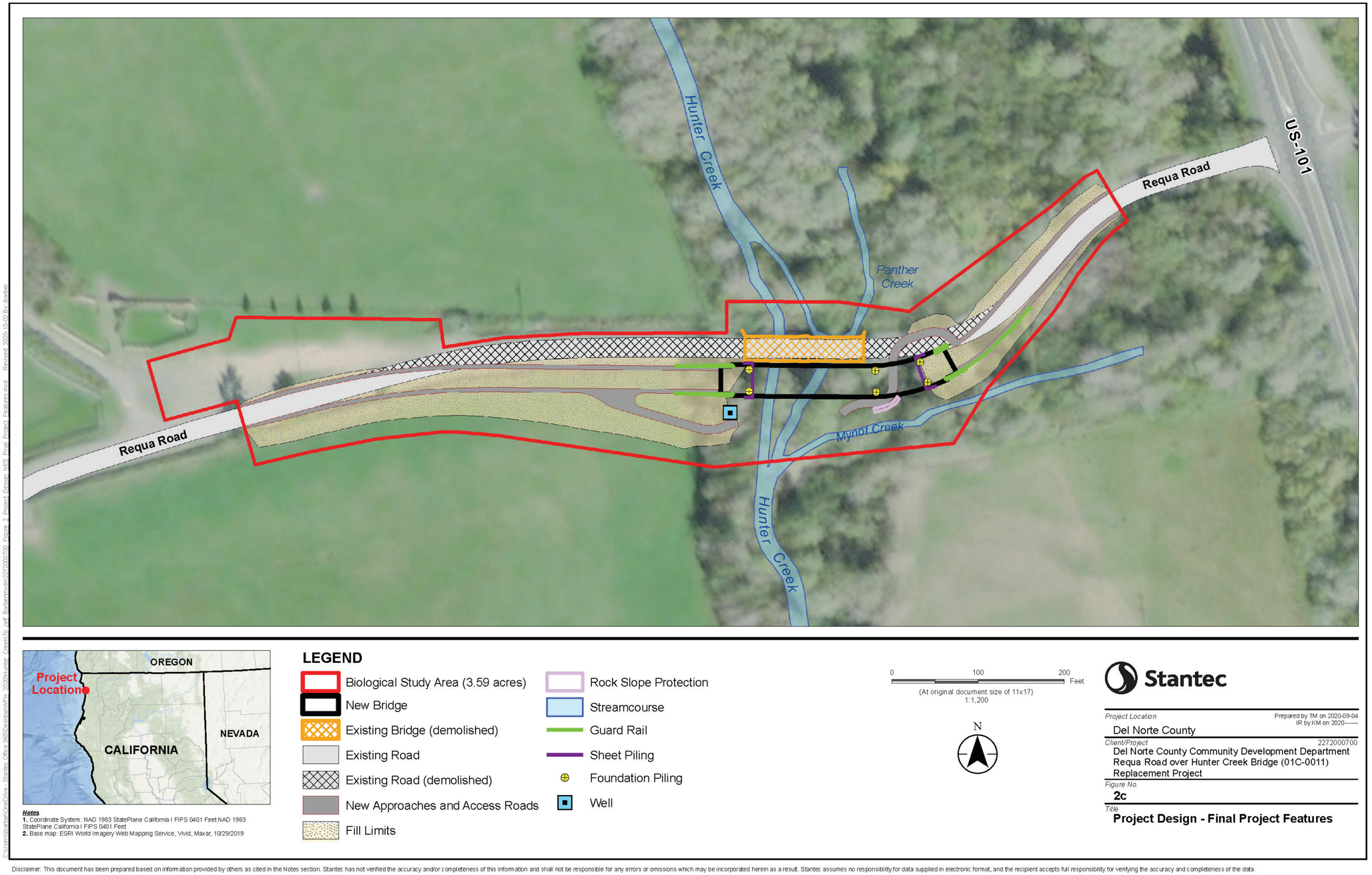

Figure 2c. Project Design – Final Project Features

This page intentionally left blank.

2.4.2 Other Construction Activities

2.4.2.1 Temporary Detour

During construction, the existing bridge would be reduced to a single lane and traffic controls (e.g., temporary stop signs or signal controls) would be used to pass traffic through the project area during construction.

2.4.2.2 Utilities

There are existing overhead electric and telecommunications at the bridge site. There is also an irrigation water line and ground water well line that is attached to the downstream face of the existing bridge. All utilities in conflict with the future bridge will be relocated based on Caltrans guidelines.

2.4.2.3 Stock Trail

A stock trail would be constructed beneath the eastern approach span of the new bridge to maintain accessibility for livestock to pasture both north and south of Requa Road. Parts of this stock trail would be stabilized using 1/4-ton RSP to prevent erosion.

2.5 PROJECT DESIGN CRITERIA

2.5.1 Contractor Staging Areas/Construction Access Routes

Contractor staging would be located on the north side of Requa Road in the large gravel pullout near the corrals, west of the bridge. In-stream construction activities would be limited based only on the need to remove the existing bridge supports/piers and construction of any new piers. A clear water diversion would be instituted as necessary.

During construction, the existing bridge would be reduced to a single lane and traffic controls (e.g., temporary stop signs or signal controls) would be used to pass traffic through the project area during construction.

2.5.2 Design Standards

The bridge would be designed in accordance with current AASHTO requirements, the Hydraulic Design Criteria established by Caltrans, and Caltrans Bridge Design Specifications and Seismic Design Criteria.

2.5.3 Equipment

The types of construction equipment and vehicles to be used during construction activities would be determined by the construction contractor. Equipment typically used for this type of project includes pick-up trucks, dump trucks, graders, backhoes, excavators, bulldozers, front-end loaders, jack hammers, generators, welders, circular saws, concrete vibrators, compactors, water trucks, truck-mounted drills, concrete delivery trucks, asphalt concrete paving machines, rollers, a crane, and service vehicles. The number of construction workers needed for the project would also be determined by the contractor.

2.6 TENTATIVE SCHEDULE

The project is expected to be constructed in two stages. Stage 1 construction is expected to occur between April 1, 2023, and October 31, 2023. Stage 2 construction is expected to occur between April 1, 2024, and October 31, 2024.

For this project, the construction sequence anticipated is as follows:

STAGE 1 CONSTRUCTION (Season 1)

- Relocate utilities off/away from bridge
- Clear and grub project area (south side of Requa Road)
- Place wick drains and approach roadway embankment (portion)
- Construct a temporary detour road adjacent to Requa Road on the northeast end of the existing bridge
- Reduce existing Requa Road bridge to a single lane and implement detour with temporary stop or signal control providing traffic control.
- Install sheet pile scour protection at abutments
- Excavate abutments to footing depth
- Install stream diversion/protection system
- Install cast-in-steel-shell abutment and pier pilings
- Construct bridge pier and abutment pile caps, wingwalls, retaining walls and backwalls
- Install rock slope protection on scour hole bank at Minot Creek for stock trail
- Erect steel girders*
- Construct stay-in-place steel deck pans*
- Install reinforcement, concrete bridge deck, and bridge railing *
- Remove stream diversion/protection system
- Construct roadway approaches to finish grade level
- Winter shutdown

** May occur in Stage 2*

STAGE 2 CONSTRUCTION (Season 2)

- Relocate utilities (on bridge if appropriate)
- Install final lift of roadway embankment, road base, hot mix asphalt, and approach slabs
- Install K-rail and shift traffic to new bridge (two lanes)
- Shift single lane traffic (south side of Requa Road), with temporary signal control, to new bridge
- Install stream diversion/protection system
- Remove existing bridge
- Remove stream diversion/protection system
- Install storm water basins
- Construct final portion of roadway approaches, railings, striping, signing
- Remove shoring and K-rail
- Open all lanes to traffic

2.7 REQUIRED PERMITS AND APPROVALS

The following permit will be required to implement the project:

- Caltrans Encroachment Permit
- U.S. Army Corps of Engineers Section 404 Nationwide Permit 14 (Linear Transportation Projects)
- North Coast Regional Water Quality Control Board Section 401 Water Quality Certification
- California Department of Fish and Wildlife Section 1600 Lake or Streambed Alteration Agreement
- California Coastal Commission Federal Consistency No Effects Determination
- Caltrans National Environmental Policy Act Determination (Categorical Exclusion [pursuant to 23 CFR 221.117(c)] issued March 17, 2021
- Del Norte County CEQA Notice of Determination to adopt the Initial Study/Mitigated Negative Declaration
- Del Norte County Coastal Grading Permit

2.8 NO PROJECT ALTERNATIVE

In addition to the proposed project, Del Norte County also considered a “No Project” alternative in its evaluation pursuant to CEQA. Under the No Project alternative, Del Norte County would not proceed with the replacement of the existing Hunter Creek Bridge. However, Caltrans has identified the existing bridge structure as structurally deficient. Implementation of the No Project alternative could result in future public safety issues and long-term issues associated with its structural integrity.

This page intentionally left blank.

3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

This chapter incorporates the Environmental Checklist contained in Appendix G of the CEQA Guidelines, including the CEQA Mandatory Findings of Significance. Each resource section provides a brief description of the setting, a determination of impact potential, and a discussion of the impacts. Where appropriate, mitigation measures are provided to reduce potential impacts to a less-than-significant level. A discussion of cumulative impacts is included at the end of this chapter.

Addressed in this section are the following 20 environmental categories and mandatory findings of significance:

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

Each of these issue areas was fully evaluated and one of the following four impact determinations was made:

- **No Impact:** No impact to the environment would occur as a result of implementing the proposed project.
- **Less Than Significant Impact:** Implementation of the proposed project would not result in a substantial and adverse change to the environment, and no mitigation is required.
- **Less Than Significant with Mitigation Incorporated:** A “significant” impact that can be reduced to a less than significant level with the incorporation of project-specific mitigation measures.
- **Potentially Significant Impact:** Implementation of the proposed project could result in an impact that has a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project” (CEQA Guidelines Section 15382).

3.1 ENVIRONMENTAL SETTING

3.1.1 Regional Setting

The project area lies in the unincorporated area of Del Norte County, 2 miles north of the town of Klamath and within the boundaries of the Yurok Tribe Reservation. Del Norte County is the northernmost county

on the California coast and is bounded on the north by Curry and Josephine Counties, Oregon, by Siskiyou County on the east, by Humboldt County to the south, and the Pacific Ocean lies to the west. Del Norte County's geography ranges from the conifer forests of the Klamath Mountain Province to the sandy beaches and dunes of the pacific coastal plain (Del Norte County 2003). The project area is located in the Klamath subarea of Del Norte County and is located in the southern portion of the county.

The Lower Klamath River Area of the Klamath Planning Subarea Coastal Zone extends inland for several miles, following the Klamath River upstream from its mouth at the Pacific Ocean to the US 101 corridor. The entirety of Requa Road is included in this area.

3.1.2 Local Setting

The project area is located in a rural setting and lies in an unincorporated area of Del Norte County, 2 miles north of the town of Klamath. The area surrounding the project site consists of rural residences, farmland, and paved and dirt roads.

3.1.3 Climate

Historical data used to describe the climate are collected at Klamath, Del Norte County, California. The climate within the project area is characterized by a Mediterranean Summer Fog with cool wet winters and cool foggy summers. Approximately 80 inches of precipitation occurs annually and most of the precipitation falls between the months of October and April. Air temperatures range between an average January high of 54 ºF and an average August high of 67 ºF. (Western Regional Climate Center 2021).

3.1.4 Existing Land Uses

Land use in the project area and vicinity, outside of the paved road corridor, is largely agricultural (pasture), widely dispersed rural residential, and stream corridor. West of the bridge, land use adjacent to the Requa Road corridor consists primarily of pastureland used for cattle crazing. Livestock facilities such as corrals and barns, and ranch houses are located on the north side of Requa Road near the west end of the project area. A gated access road is located near the southeast corner of the bridge, and residential driveways and agricultural access roads occur near the western end of the proposed project area. A large gravel pullout extends almost 400 feet along the north side of Requa Road near the west end of the project area. A small-fenced area containing water supply utilities is located about 300 feet west of the bridge immediately adjacent to the north side of Requa Road. US 101 forms the eastern boundary of the project area, intersecting with Requa Road approximately 0.1 mile east of the bridge.

3.1.5 Topography

The topography of the project area is generally characterized as an alluvial plain and backswamp that is associated with its proximity to the mouth of the Klamath River. Requa Road is within the project area is built on road prism elevated several feet above alluvial plan and backswamp. The current bridge grade is relatively flat with the roadway prism elevated approximately 4 feet above the grade of the pasture west of the bridge. The elevation is approximately 25 feet above mean sea level (Stantec 2020a).

3.1.6 Hydrological Setting

Hydrology in the project area is provided primarily by Hunter Creek, which is a perennial stream that drains southward through the project area. The area around Hunter Creek has a long history of flooding with historic floods in 1955, 1964, 1986, 1994, and 2005. Minot Creek drains southwest through the project area is designated as an intermittent stream. Panther Creek is a perennial side channel of Hunter Creek and flows south through the project area. All three streams are tributary to the Klamath River located approximately 0.5 miles south of the project area (Stantec 2020b).

3.1.7 Soils

According to the *Custom Soil Resource Report for Humboldt and Del Norte Area, California* prepared by the United States Department of Agriculture Natural Resources Conservation Service, four soil map units occur within the study area and are described below (USDA 2021).

- **Weott, 0 to 2 percent slope (110).** This is hydric, very poorly drained soil associated with depressions, flood-plain steps and backswamp landforms. The depth to a restrictive layer is greater than 80 inches.
- **Arlynda, 0 to 2 percent slopes (119).** This is a hydric, very poorly drained soil associated with depressions, flood-plain-steps and backswamp landforms. The depth to restrictive layer is greater than 80 inches.
- **Worswick-Arlynda complex, 0 to 2 percent slopes (171).** This is hydric, very poorly drained soil associated with river valley landforms. The depth to a restrictive layer is greater than 80 inches.
- **Pistolriver, 0 to 2 percent slopes (184).** This is somewhat poorly drained soil associated with floodplain landforms. The depth to restrictive feature is greater than 80 inches.

3.1.8 Geology

The project area is underlain by Quaternary alluvium deposits and marine deposits ranging from the Pleistocene to Holocene era and Older Quaternary alluvium and marine deposits from the Pleistocene era (USGS 2021).

3.1.9 Vegetation Community Types

Vegetation communities are based on descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988) and the results of a field survey conducted for the project. Four vegetation communities or other habitats occur in the project area: barren, montane riparian, pasture, and riverine (Stantec 2021a) (Figure 3).

Barren. Barren habitat is generally devoid of vegetation and includes the paved roadways and adjacent graveled driveways and shoulders. Sparse opportunistic weedy species are present within the barren habitat.

Montane Riparian. The montane riparian habitat occurs along the banks of the creeks in the project area. Montane riparian habitat is generally characterized as a multi-layered canopy composed of winter-deciduous trees, with a dense understory and scattered herbaceous growth. The dominant canopy trees are red alder (*Alnus rubra*) and Scouler's willow (*Salix scouleriana*). Other common riparian trees and shrubs in the study area include big leaf maple (*Acer macrophyllum*), black cottonwood (*Populus balsamifera*), coast twinberry (*Lonicera involucrata*), and Himalayan blackberry (*Rubus armeniacus*). The portion of the montane riparian habitat on the north side of Requa Road east of Hunter Creek has a swampy understory that is dominated by slough sedge (*Carex obnupta*), common bog rush (*Juncus effusus),* and yellow skunk-cabbage (*Lysichiton americanus*).

Pasture. Pasture habitat occurs as the managed pasture on the alluvial plain west of Hunter Creek. Cattle graze the pastures year-round and the pastures are irrigated during the growing season starting in late May. Dominant pasture grasses and forbs including ryegrass (*Festuca perennis*), red fescue (*Festuca rubra),* buttercup (*Ranunculus repens*), and white clover (*Trifolium repens*).

Riverine. Riverine habitat is present within the ordinary high water mark of each of the three creeks – Hunter, Panther, and Minot – and is characterized as channel that is devoid of terrestrial vegetation. The substrates of Hunter and Minot Creeks are predominantly gravel and sand, and willows and alder are rooted at the top of the banks. Panther Creek appear to be a slower flowing channel because the substrate contains more silt, and there are scattered clusters of slough sedge along the banks.

Notes
1. Coordinate System: NAD 1983 StatePlane California I FIPS 0401 Feet NAD 1983 StatePlane California I FIPS 0401 Feet
2. Data Sources: 2. Sources: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Biological Study Area (3.59 acres)

Habitat Type

- Barren (1.36 acres)
- Montane Riparian (1.04 acres)
- Pasture (0.84 acre)
- Riverine (0.35 acre)

0 50 100 Feet
(At original document size of 11x17)
1:1,200

N

Stantec

Project Location
Del Norte County
Prepared by ST on 2020-02-11
IR by KB on 2020-02-11

Client/Project
Del Norte County Community Development Department
Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project
2272000700

Figure No.
3

Title
Habitat Types

Figure 3. Habitat Types

This page intentionally left blank.

3.2 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
I. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
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 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?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion of Impacts

a) **No Impact.** There are no scenic vistas in the vicinity of the project and there would be no impact (Caltrans 2021a).

b) **Less Than Significant Impact.** Removal of montane riparian vegetation would be limited and localized to allow for the slight downstream alignment proposed for the new bridge. There are no historic structures or buildings; Requa Road is not designated as scenic; and the project construction area cannot be seen from US 101 (a state highway designated as eligible for listing as scenic).

c) **Less Than Significant Impact.** The project was designed to minimize impacts on visual resources and to be consistent with the existing aesthetic to the extent practicable (Stantec 2020c). Although the structure's elevation profile would be raised by approximately 7 feet, the effect on the natural viewshed would be less than significant, shifting slightly the horizontal placement of the structure as seen from the channel.

d) **Less Than Significant Impact.** The project would temporarily increase the potential for glare emanating from the project area during construction due to the presence of construction equipment and removal of vegetation. There would be some potential for additional glare to occur resulting from the permanent removal of vegetation to create the new bridge approaches; however, this would be localized, seasonal occurrence. The project would not introduce any new light sources or materials prone to glare. Although the new safety rail would be metal, it would be made of non-glare material. Because it would follow the existing alignment, headlights of vehicles traveling through the area would result in no new impacts and would be buffered by surrounding vegetation, topography, and the absence of any sensitive receptors (e.g., residences) in line with the road.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
II. AGRICULTURAL 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 regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, 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))?	☐	☐	☐	☒
d) Result in loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☒	☐

Discussion of Impacts

a) **No Impact.** Del Norte County has not been mapped by the Natural Resources Conservation Service Farmland Mapping and Monitoring Program to define the locations of prime agricultural land (DOC 2021a, Stantec 2021a). Lands adjacent to the existing County ROW through the project area are not designated as Prime Farmland by the State but are zoned for agricultural use. Cattle grazing is the primary current use of lands immediately adjacent to the north and south sides of Requa Road in the project area. Therefore, the project would have no impact on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

b) **Less Than Significant Impact.** No Williamson Act lands are mapped in the project area as none exist in Del Norte County. Due to the realignment of the new bridge slightly downstream, some permanent ROW acquisition of zoned Agricultural land (0.62 acres) would be required. However, a

Farmland Conversion Impact Rating for Corridor Type Projects was prepared for the project which indicated that the project would have minimal impact on prime farmland. Therefore, there would be a less than significant impact.

c) **No Impact.** The project would not cause rezoning of forestland, timberland, or timberland zoned for timber production. The project area is not zoned for timber production or as forest land.

d) **No Impact.** The north side of Requa Road is zoned for forestry. However, the construction of the proposed project is not expected to affect this area. Therefore, the project would not convert any forestland to non-forest uses and would not result in the loss of forestlands in Del Norte County.

e) **Less Than Significant Impact.** The proposed project would require the acquisition 0.62 acres of land used for agricultural uses (pasture) to a non-agricultural use. However, the Farmland Impact Assessment prepared by Stantec (2021a) identified that the project would have minimal impact on farmland. Project implementation is not anticipated to result in the conversion of any additional surrounding farmlands to a non-agricultural use outside of the 0.62 acres that will be converted to roadway. Therefore, impacts would be less than significant.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
III. 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. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Discussion of Impacts

a) **Less Than Significant with Mitigation Incorporated.** Del Norte County is designated as in attainment or unclassified for all current National Air Quality Standards (NCUAQMD 1995). Therefore, air quality conformity requirements do not apply. The operation of project construction equipment would be contained within localized areas and would result in temporary emissions (i.e., confined to short-term

grading and construction activities) of reactive organic gases, oxides of nitrogen, which are ozone precursors, and carbon monoxide. Specifically, reactive organic gases and oxides of nitrogen emissions are associated with construction activity vehicle trips, delivery of materials, and construction equipment exhaust. Additionally, earth-moving activities could result in localized increased levels of fugitive dust and particulate matter (PM), which includes $PM_{2.5}$ (particulate matter 2.5 microns or less) and PM_{10}. (particulate matter 10 microns or less). Such localized PM is generated during site grading, excavation, and exhaust from construction equipment. However, equipment used for construction and operation of the project would conform to the rules and regulations of the North Coast Unified Air Quality Management District (NCUAQMD). The project would not increase long-term operational emissions. The project would not conflict with or obstruct implementation of the current *North Coast Unified Air Quality Management District Particulate Matter (PM_{10}) Attainment Plan* (NCUAQMD 1995) or any other applicable air quality plan. Implementation of *Mitigation Measure #1—Air Quality/Dust Control* (described in Section 3.2.1) will further reduce air quality impacts. As a result of these implementations, the project's air quality impacts would be less than significant with mitigation incorporated. Operational impacts on air quality would be consistent with existing conditions.

b) **Less Than Significant with Mitigation Incorporated.** The project would replace an existing structure and would not change traffic composition, traffic speed, or traffic volume after project completion and would not result in a net increase of pollutants. There would be no impact to operational emissions. Although Del Norte County is designated as unclassified or attainment for all federal and state ambient air quality standards, construction activities associated with the project would result in a minor net increase in PM_{10} and $PM_{2.5}$. Construction emissions would be temporary and would primarily be localized around the construction areas. Additionally, *Mitigation Measure #1 – Air Quality/Dust Control* (described in Section 3.2.1) will be implemented to ensure there are no significant effects to air quality from construction related activities. Therefore, project construction-related impacts would be less than significant with mitigation incorporated. Operational impacts on air quality would be consistent with existing conditions.

c) **No Impact.** There are no identified sensitive receptors (e.g., residences) in line with the road. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations and there would be no impact.

d) **Less Than Significant Impact.** Construction activities would involve the use of gasoline- or diesel-powered equipment that emits exhaust fumes. These activities would take place intermittently throughout the workday, and the associated odors would be expected to dissipate within the immediate vicinity of the work area. The infrequency of the emissions, rapid dissipation of the exhaust into the air, and short-term nature of the construction activities would result in less-than-significant odor impacts. Operational impacts on air quality would be consistent with existing conditions.

Mitigation Measures

3.2.1 Mitigation Measure #1 – Air Quality/Dust Control

The following measures will be implemented to avoid or minimize the potential for adverse impacts on air quality:

- The County shall include provisions in the construction bid documents that the contractor shall implement a dust control program to limit fugitive dust emissions. The dust control program shall include, but not be limited to, the following elements, as appropriate:
  - Water inactive construction sites and exposed stockpile sites at least twice daily, including during non-workdays or until soils are stable.
  - Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles, These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used.
  - Equipment or manual watering shall be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

  Timing/Implementation: During construction
  Enforcement: County
  Monitoring: County and/or its contractor

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion of Impacts

a) **Less than Significant with Mitigation Incorporated.** A Biological Assessment/Essential Fish Habitat Assessment report was prepared for the project by Stantec in 2021. A delineation of Waters of the United States and delineation of wetlands and streams under the California Coastal Act were prepared by Stantec in 2020. Collectively, these studies were used to assess the project impacts on special-status biological resources known to occur in the project area and the results are outlined in the project's Natural Environment Study (Stantec 2021c).

Special-Status Plants. A botanical survey conducted on June 26 and September 13, 2012, and updated on June 5, 2020, concluded that no special status plant species occur in the project area. Based on habitat assessment, the project area provides potential habitat for 11 special status plant species, but these species were not observed during the botanical survey and are not likely to occur. Thus, implementation of the proposed project would not adversely affect special status plant species and impacts would be less than significant.

Special-Status Wildlife. The following species could use the habitats in the project area or immediate vicinity:

Amphibians and Reptiles

- foothill yellow-legged frog *(Rana boylii)* – State Species of Special Concern
- Northern red-legged frog *(Rana aurora)* – State Species of Special Concern
- Western pond turtle *(Emys marmorata)* – State Species of Special Concern

Fish

- coastal cutthroat trout *(Oncorhynchus clarkia clarkia)* – State Species of Special Concern
- river lamprey *(Lampetra ayresii)* – State Species of Special Concern
- Southern distinct population segment eulachon *(Thaleichthys pacificus)* – Federally-listed as Threatened
- Southern Oregon/Northern California coast evolutionarily significant unit (ESU) coho salmon *(Oncorhynchus kisutch)* – Federally-listed as Threatened; State-listed as Threatened
- summer-run steelhead trout *(Oncorhynchus mykiss irideus)* – State Candidate Endangered, State Species of Special Concern
- Upper Klamath and Trinity Rivers (ESU) spring-run chinook salmon (*Oncorhynchus tshawytscha pop. 30*) – Federal Candidate; State Candidate Endangered, State Species of Special Concern

Birds

- Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*) – State Species of Special Concern
- long-eared owl (*Asio otus*) – State Species of Special Concern

- Northern spotted owl (*Strix occidentalis caurina*) – Federally-listed as Threatened; State-listed as Threatened
- tricolored blackbird (*Agelaius tricolor*) – State Species of Special Concern,
- white-tailed kite (*Elanus leucurus*) – State Fully Protected Species,
- yellow-breasted chat (*Icteria virens*) – State Species of Special Concern
- yellow warbler (*Dendroica petechia*) – State Species of Special Concern

Mammals

- Northern California/Southern Oregon distinct population segment fisher (*Pekania pennanti*) – State Species of Special Concern
- pallid bat (*Antrozous pallidus*) – State Species of Special Concern
- ring-tailed cat (*Bassariscus astutus*) – State Species of Special Concern
- Townsend's big-eared bat (*Corynorhinus townsendii*) – State Species of Special Concern
- white-footed vole (*Arborimus albipes*) – State Species of Special Concern

None of these species were incidentally observed in the project area during the site visits.

Fish. The Biological Assessment/Essential Fish Habitat Assessment report (Stantec 2020d) determined that the proposed project may affect and is likely to affect the Southern Oregon/Northern California coast evolutionarily significant unit coho salmon, summer-run steelhead trout, and coastal cutthroat trout due to increased turbidity and suspended sediment during diversion installations and potential stormwater runoff; hazardous materials exposure from accidental spill of lubricants and fuels; impaired fish passage conditions due to the installation of temporary diversions; pile driving and bridge demolition acoustic disturbance; fish handling for relocation to prevent entrapment and injury during installation of stream diversions; and change in streamside vegetation providing stream shading. *Mitigation Measure #2 –Special Status Fish Species, Mitigation Measure #3 – Limited Operations Period, Mitigation Measure #4 – Erosion and Sedimentation Control, Mitigation Measure #5 – Prevention of Accidental Spills, Mitigation Measure #6 – Replacement of Lost Riparian Habitat*, and *Mitigation Measure #7 – Prevention of Spread of Invasive Species* (described in sections 3.2.2 through 3.2.7, respectively) will be implemented to reduce any impacts on these species to a less than significant level. Project operation would be consistent with existing conditions and would have no impact on this species. Project operation would be consistent with existing conditions and would have no impact on this species.

River Lamprey. The proposed project could adversely affect river lamprey if they are present in the perennial streams in and near the construction area. River lamprey could be indirectly affected by increased turbidity and suspended sediment during diversion installation and potential stormwater runoff; hazardous materials exposure from accidental spill of lubricants and fuels; impaired fish passage conditions due to the installation of temporary diversions; pile driving and bridge demolition acoustic disturbance; fish handling for relocation to prevent entrapment and injury during installation of stream diversions; and a change or loss of shaded riverine aquatic habitat, Direct effects could occur from physical injury from contact or crushing by placement of temporary diversion. *Mitigation Measure #3*

– Limited Operations Period, Mitigation Measure #4 – Erosion and Sedimentation Control, Mitigation Measure #5 – Prevention of Accidental Spills, Mitigation Measure #6 – Replacement of Lost Riparian Habitat, and *Mitigation Measure #7 – Prevention of Spread of Invasive Species* (described in sections 3.2.3 through 3.2.7, respectively) will avoid or minimize impacts on the species. Project operation would be consistent with existing conditions and would have no impact on this species.

Amphibians and Reptiles. The streams and associated riparian habitat in and near the project area provide potential habitat for foothill yellow-legged frog, northern red-legged frog, and western pond turtle. The proposed project could adversely affect these special-status amphibian and reptile species if individuals are present in the project area during construction. Potential direct effects include harassment, injury, and morality of individuals due to equipment and vehicle traffic. Indirect effects could occur if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. *Mitigation Measure #4 – Erosion and Sedimentation Control* (described in Section 3.2.4)*, Mitigation Measure #5 – Prevention of Accidental Spills* (described in Section 3.2.5)*, Mitigation Measure #6 – Replacement of Lost Riparian Habitat* (described in Section 3.2.6), and *Mitigation Measure #8 –Special Status Amphibian and Reptile Species* (described in Section 3.2.8) will be implemented to reduce impacts to a less than significant level. Project operation would be consistent with existing conditions and would have no impact on these species.

Special Status Birds and Migratory Birds and Raptors. The pasture lands and montane riparian habitat in the project area and vicinity provide potential nesting and foraging habitat for various bird species, including migratory birds, raptors, and special status birds. Special status bird species that could use these habitats include tricolored blackbird, white-tailed kite, northern spotted owl, long-eared owl, yellow warbler, yellow-breasted chat, and Bryant's savannah sparrow. Other protected birds including migratory birds and raptor species may occur in the project area and vicinity.

Construction activities (e.g., vegetation removal and equipment noise) would occur during the avian breeding season (generally February through August, depending on the species) and could disturb nesting birds in or adjacent to the project area. Construction-related disturbance could result in the incidental loss of fertile eggs or nestlings or nest abandonment, which could affect local and regional populations of affected birds, resulting in a significant impact. Foraging birds and individuals present in or adjacent to the project area outside of the avian breeding season would not be adversely impacted by construction activities due to their mobility and availability of habitat outside of the project area. *Mitigation Measure #9 –Special Status Birds and Migratory Birds and Raptor Species* (described in Section 3.2.9) will be used to ensure that any impacts on special status bird species and migratory birds, including raptors, would be reduced to a less than significant level. Project operation would be consistent with existing conditions and would have no impact on these species.

Northern Spotted Owl and Marbled Murrelet. No habitat for marbled murrelet occurs within a 0.25-mile buffer of the project area. No auditory or visual disturbances are anticipated as a result of project construction. Project construction and operation would have no impact on marbled murrelet.

No habitat for nesting Northern spotted owl occurs in the project area; therefore, tree removal in the project area would have no effect on northern spotted owl habitat. However, dispersal habitat and a small amount of nesting/roosting habitat is located within the extreme sound level (100 decibels A-weighted [dB]) auditory impact buffer (0.25 miles). Based on the auditory and visual disturbance analysis performed in April 2020 (Stantec 2020e) for northern spotted owl, if construction activities generate sound levels above 100 decibels (dB) during the breeding season for northern spotted owl (February 1 through July 9), auditory harassment could occur if owls are nesting within 0.25 miles of the activity generating sound. The proposed project qualifies under the *Programmatic Informal Consultation for the California Department of Transportation's Routine Maintenance and Repair Activities, and Small Projects Program for District 1 and 2* (USFWS 2014) (Programmatic Consultation) for potential impacts on northern spotted owl. The Programmatic Consultation required a maximum of 20 dB over ambient or less than 90 dB total during the nesting period to ensure impacts on nesting northern spotted owl would not occur. Therefore, to comply with the Programmatic Consultation, *Mitigation Measure #10 – Northern Spotted Owl* (described 3.2.10) will be implemented to minimize or avoid project-related effects on nesting northern spotted owls. Therefore, impacts to northern spotted owl would be less than significant with implementation of mitigation. Project operation would be consistent with existing conditions and would have no impact on this species.

Pallid Bat and Townsend's Bat. The bridge over Hunter Creek does not contain cavities suitable for day roosting bats or maternal colonies. However, individual bats may use sections of the bridge as night roosts and the pastureland, riverine, and riparian habitat in or near the project area could provide potential foraging habitat. Bats may roost individually or in small groups in tree cavities or in riparian vegetation or on the bridge at night. Due to the ability of individual bats to move away from disturbance, direct impacts on bats are not expected when the bats are not in a maternity colony. If construction occurs on the bridge at night when bats may use it as a night roost, indirect effects may occur. Therefore, *Mitigation Measure #11 – Pallid Bat and Townsend's Bat* (described in Section 3.2.11) is required to reduce the potential for adverse impacts. Project operation would be consistent with existing conditions and would have no impact on either species.

Ring-tailed Cat. Ring-tailed cat occurs in riparian habitats and in brush stands of most forest and shrub habitats. Brush present in the riparian habitat provide potential denning sites for ring-tailed cat. Direct impacts on ring-tailed cat could occur from tree removal and vegetation removal if it takes place during the natal and maternal denning period (May 1 through June 30). Therefore, *Mitigation Measure #12 – Ring-Tailed Cat* (described in Section 3.2.12) will be implemented to reduce the potential for adverse impacts. Project operation would be consistent with existing conditions and would have no impact on this species.

White-Footed Vole. Deciduous vegetation in the montane riparian habitat in the project area could provide potential habitat for the white-footed vole. Direct impacts on white-footed vole could result from tree removal and vegetation removal. Temporary noise disturbance generated by construction could indirectly affect this species as well. *Mitigation Measure #6 – Replacement of Lost Riparian Habitat* (Section 3.2.6) and *Mitigation Measure #13 – White-Footed Vole* (described in Section 3.2.13) will be implemented to reduce the potential for adverse impacts on these species. Project operation would be consistent with existing conditions and would have no impact on this species.

b) **Less than Significant with Mitigation Incorporated.** Montane riparian habitat occurs in the project area and vicinity adjacent to Hunter, Minot, and Panther creeks. The proposed project would result in permanent impacts on approximately 0.45 acre of montane riparian habitat. Riparian trees and shrubs would be removed to accommodate the new bridge and remaining riparian vegetation under the new bridge would likely be shaded out resulting in permanent impact. However, the proposed project was designed to avoid and minimize the removal of riparian vegetation to the maximum extent practicable. Permanent loss of riparian habitat will be restored at a 3:1 ratio as outlined in *Mitigation Measure #6 – Replacement of Lost Riparian Habitat* (described in Section 3.2.6). Riparian vegetation re-planting would occur along Hunter Creek within the area occupied by the existing bridge and Requa Road once the existing bridge and road pavement are removed. Therefore, impacts would be less than significant.

c) **Less than Significant with Mitigation Incorporated.** Stantec conducted a delineation of potential waters of the United States in the project area on May 26, 2015, and a delineation of wetlands and streams under the California Coastal Act was completed by Stantec on July 29, 2020 (Stantec 2020a). The proposed project would result in a temporary impact on 0.11 acres consisting of 0.01 acre of intermittent stream, 0.08 acre of perennial stream, 0.01 acre of riparian/fresh emergent wetland, and 0.01 acre of riparian wetlands. Permanent impacts would total 0.47 acre and consist of 0.001 acre of intermittent stream and 0.17 acre of seasonal wetland. Under the U.S. Army Corps of Engineers Nationwide Permit 14 for Linear Transportation Projects, notification to the U.S. Army Corps of Engineers is required for impacts on special aquatic sites (i.e., wetlands) and mitigation will include 3:1 area replacement for permanent impacts and 1:1 for temporary impacts. *Mitigation Measure #6 – Replacement of Lost Riparian Habitat* (described in Section 3.2.6) will provide onsite mitigation at a 1:1 and 3:1 ratio and impacts would be minimized.

d) **Less than Significant with Mitigation Incorporated.** Installation of temporary stream diversion/protection structures for bridge construction and removal could potentially impede fish passage due to channel restriction and obstruction. However, the temporary diversions would be constructed in a manner to maintain the natural, wetted, base-flow, channel cross-sectional area to minimize hydraulic changes and allow unimpeded fish movement. Additionally, any channel and floodplain areas temporarily affected by installation of stream diversion/protection measures and construction excavations would be returned to their pre-construction condition. *Mitigation Measure #3 – Limited Operations Period* (described in Section 3.2.3) will require that to protect the most vulnerable life staged of sensitive fish species occurring within the project area, instream work would be restricted to the period between June 15 and October 15. This seasonal work window would avoid the salmon spawning season as it correlates to a period of the year when juvenile salmonid abundance is at its lowest and eulachon would be absent. This work window also avoids the late fall-winter migration period for adult salmon that may migrate

through the project area to upstream spawning grounds, and the peak spring to early summer smolt out-migration. Therefore, the proposed project would not greatly affect the movement of fish species or impede the use of nursery sites and impacts would be less than significant.

e) **No Impact.** The project will comply with the goals and objectives described in the County's General Plan (Del Norte County 2003), including measures for water quality and biological resources protection. The project would not conflict with any local biological resource policies or ordinances.

f) **No Impact.** Currently, there are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved habitat conservation plans that cover the project area. The project would have no impact on local, regional, or state conservation plans.

Mitigation Measures

3.2.2 Mitigation Measure #2 – Special Status Fish Species

The following measures outlined in the *Natural Environment Study* (Stantec 2021c) and draft *Biological Assessment/Essential Fish Habita*t (Stantec 2020d) will be implemented to avoid or minimize the potential for significant impacts on special-status fish species:

- Use of open channel stream diversion and protection measures in Hunter, Panther, and Minot creeks during bridge construction and demolition operations to isolate construction areas from stream channels and maintain aquatic habitat connectivity and unimpeded fish passage for juvenile coho salmon, steelhead trout, and cutthroat trout using the streams for summer rearing habitat.

- Biological monitoring during installation of stream diversion/protection measures to salvage and relocate fish from portions of stream channels that may be dewatered by these diversions.

- Hydroacoustic monitoring during impact pile driving and hoe-ram demolition during bridge removal to prevent exceedance of adverse underwater sound pressure levels (i.e., 206 dB peak, 187 dB cumulative sound exposure level [cSEL]).

- Minimizing use of impact pile driving for 60-inch cast-in-steel-shell foundation piles to only that necessary to achieve final design tip elevations. Engineering analysis demonstrates that a combination of vibratory and impact pile driving would be applicable for geologic conditions in the project area.

- Installation of aquatic habitat structures (e.g., habitat logs, rootwads, boulders) to create, restore, and enhance formation of channel pools and maintain habitat complexity in the project area.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

3.2.3 Mitigation Measure #3 – Limited Operations Period

- To protect the most vulnerable life staged of sensitive fish species occurring within the project area, in-stream work would be restricted to the period between June 15 and October 15. This seasonal work window would avoid the salmon spawning season as it correlates to a period of the year when juvenile salmonid abundance is at its lowest and eulachon would be absent. This work window also avoids the late fall-winter migration period for adult salmon that may migrate through the project area and vicinity to upstream spawning grounds, and the peak spring to early summer smolt out-migration. Construction activities performed outside of the bed, channel, or bank of a stream that have the potential to directly impact surface waters (i.e., soil disturbance that could cause turbidity) would be performed during the dry season, typically between June through October, or as weather permits per the approved Contractor-prepared Storm Water Pollution Prevention Plan (SWPPP) and/or other project permit requirements.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

3.2.4 Mitigation Measure #4 – Erosion and Sedimentation Control

Erosion control measures will be implemented during construction of the proposed project. These measures will conform to the provisions in Section 21 of the Caltrans Standard Specifications (2018) and any special provisions included in the contract for the proposed project. Such provisions include the preparation of a SWPPP, which will describe and illustrate the types and locations of best management practices (BMPs) in the proposed project site to be implemented based on local conditions and would require regular inspections and a Rain Event Action Plan.

Erosion control measures to be included in the SWPPP or to be implemented by the County will include the following:

- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the summer and early fall period to minimize the potential for stormwater transport of sediment to surface water features. Instream construction will be restricted to June 15 to October 15. Upland construction activities that must take place during the late fall, winter, or spring (e.g., vegetation removal prior to avian nesting periods) will use temporary erosion and sediment control structures that shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are installed, if necessary.
- Areas where wetland and upland vegetation need to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved by the County. Exclusionary fencing will be installed around areas that do not need to be disturbed.
- Approved fabric barriers will be installed to prevent the discharge of contaminants (e.g., sediment, oil, and grease), when equipment is working adjacent to or over waterways.
- Within 10 days of completion of construction in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, weed-free mulch shall be applied to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50

percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, weed-free mulch shall be applied to all exposed areas upon completion of the day's activities. Soils shall not be left exposed during the rainy season.

- Suitable BMPs, such as silt fences, straw wattles, or catch basins, shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures will be installed prior to any clearing or grading activities. Any sediment built up at the base of BMPs will be removed before BMP removal to avoid any accumulated sediments from being mobilized post-construction.
- Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated with native species.
- Any new or previously excavated gravel material placed in the channel shall meet Caltrans' cleanness test indicating the relative proportions of clay-sized material clinging to coarse aggregate and screenings (California Test No. 227) with a value of 85 or higher (excluding such materials as soils in the RSP to allow for riparian planting).
- All dewatering activities will be conducted in compliance with the Caltrans Field Guide for Construction Site Dewatering and Section 13-4.03G of the Caltrans Standard Specifications. Water removed from the channels for temporary diversions or excavations required for installation or removal of culverts will be pumped to a temporary sediment retention basin outside of the channel, through a mechanized water filtration system, or into Baker tanks or similar storage system and trucked offsite to an authorized disposal site. If a temporary basin is constructed, it shall be located outside of the active channel and include sediment sock or similar sediment control on the discharge.

Timing/Implementation:	Prior to and during construction
Enforcement:	Caltrans, County
Monitoring:	County and its contractor

3.2.5 Mitigation Measure #5 – Prevention of Accidental Spills

The proposed SWPPP will include a waste management section that provides procedural and structural BMPs for collecting, handling, storing, and disposing of waste generated by project construction and to prevent the accidental release of pollutants. The contractor would also be required to submit a demolition and debris containment and management plan to the Resident Engineer for approval prior to bridge demolitions. All construction will be completed according to the most recent Caltrans Site Best Management Practices Manual to protect water quality including, but not limited, to the following measures:

- A site-specific spill prevention plan to be included in the SWPPP shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms will be constructed to prevent spilled materials from reaching surface water features.
- Equipment and hazardous materials will be stored in the staging area 500 feet to the west and away from surface water features.

- Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in the staging area 500 feet away from Hunter Creek or within an adequate fueling containment area, at least 50 feet away from all streams.
- Equipment operating within the ordinary high water mark shall use non-toxic vegetable oil for operating hydraulic equipment instead of traditional hydraulic fluids.
- Minimize sand and gravel from new asphalt getting into storm drains, streets, and creeks by sweeping. Old or spilled asphalt must be recycled or disposed as approved by the Resident Engineer.
- All project materials will be prevented from entering streams. Silt fences will be installed until soils are stabilized or permanent controls are in place.

Timing/Implementation:	Prior to and during construction
Enforcement:	Caltrans, County
Monitoring:	County and its contractor

3.2.6 Mitigation Measure #6 – Replacement of Lost Riparian Habitat

The following measures shall be implemented to reduce potential impacts to riparian habitat in the project area:

- The width of the construction disturbance zone within the riparian habitat shall be minimized through careful pre-construction planning.
- Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to minimize impacts to riparian vegetation outside of the construction area are minimized.
- Onsite restoration shall occur in areas that have been disturbed during project construction. All native woody plants (>6 inches in diameter) removed shall be replanted with new plantings at a minimum 3:1 ratio. This replanting ratio will help establish at least one vigorous plant for each plant removed.
- Plant spacing intervals will be determined as appropriate based on-site conditions following construction and will be similar to undisturbed riparian habitat in the local area.
- Revegetation monitoring will be implemented in compliance with regulatory permit conditions and be initiated immediately following completion of the planting. The monitoring surveys will consist of a general site walkthrough evaluating the survival and health of riparian plantings, signs of drought stress, weed or herbivory problems, and the presence of trash or other debris. The mitigation will be considered successful if one native woody plant (>6-inch diameter) survives for every native woody plant (>6-inch diameter) removed. If any “volunteer” native species occur in disturbed areas, they can contribute to the replacement numbers for the success criteria. Annual monitoring and reporting of performance of riparian wetland mitigation will be conducted for a minimum period of three years following construction. If monitoring results indicate that revegetation efforts are not meeting established success criteria, corrective measures would be implemented.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

3.2.7 Mitigation Measure #7 – Prevention of Spread of Invasive Species

The following measures will be implemented to prevent the spread of invasive species:

- All equipment used for construction activities will be inspected, cleaned, and verified to be weed-free prior to entering the project area.
- If project implementation calls for mulches or fill, they will be certified to be weed-free.
- Seed mixes or other vegetative material used for re-vegetation of disturbed sites will consist of locally adapted native plant materials.
- Gravels, concrete blocks, and other materials used for the temporary stream diversions shall be obtained locally for gravels or properly and thoroughly cleaned to remove silt and encrusted materials prior to installation.
- Construction equipment (including boots/waders and hand tools) that may enter stream courses shall be properly disinfected or cleaned according to guidance provided by the State of California Aquatic Invasive Species Management Plan (CDFG 2008, U.S. Bureau of Reclamation 2012) prior to instream work to prevent the spread of aquatic invasive species.

Timing/Implementation:	Prior to and during construction
Enforcement:	Caltrans, County
Monitoring:	County and its contractor

3.2.8 Mitigation Measure #8 – Special Status Amphibian and Reptile Species

The following measures will be implemented to avoid or minimize the potential for adverse impacts on special-status amphibians and reptiles.

- A biologist will provide environmental awareness training for construction personnel prior to onset of work. The training will instruct construction personnel on how to recognize potential special status species.
- To avoid potential injury or mortality to individual special status species, vegetation clearing (i.e., removal of small trees, shrubs, rush, and tall dense grasses) will be done manually using hand tools (e.g., chainsaw, lopper, weed trimmer). The vegetation will be cut to ground level and be removed from the work area by hand.
- If special status species are encountered in the project area during construction and could be harmed by construction activities, work will stop in the area and the County will notify California Department of Fish and Wildlife (CDFW). Upon authorization from CDFW, a biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area.
- If a western pond turtle nest is discovered during construction activities, a biologist will flag the site and determine if construction activities can avoid affecting the nest. If the nest cannot be avoided, it will be excavated ad relocated to a suitable location outside of the construction impact

zone by a biologist in coordination with CDFW. The County will inform Caltrans when such an activity occurs.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

3.2.9 Mitigation Measure #9 – Special Status Birds and Migratory Birds and Raptors

The following measures will be implemented to avoid or minimize the potential for adverse impacts on nesting special status birds and migratory birds and raptors:

- If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season (February 1 through August 31), if practicable. This will help preclude nesting and substantially decrease the likelihood of direct impacts.

- If construction occurs during the nesting season (February 1 through August 31), a biologist shall conduct a pre-construction survey of the project area including a 500-foot buffer for white-tailed hawk and all other raptor species, and a 250-foot buffer for all other species, as access is available, to locate active bird nests and identify measures to protect the nests. The pre-construction survey will be performed between February 1 and August 31, but no more than 14 days prior to the implementation of construction activities (including staging and equipment access). If a lapse in construction activities for 14 days or longer occurs between those dates, another pre-construction survey will be performed.

- If an active nest if found, a biologist (in consultation with the California Department of Fish and Wildlife) will determine the extent of a construction-free buffer zone to be established around the nest. The County will inform Caltrans when such an activity occurs.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW, Caltrans, County
Monitoring:	County and its contractor

3.2.10 Mitigation Measure #10 – Northern Spotted Owl

To minimize or avoid project related effects on nesting northern spotted owl, the following measure will be implemented:

- Construction that creates project-generated sound that exceeds 20 dB over ambient sound levels or 90 dB total including ambient level will not occur during the northern spotted owl nesting period (February 1 through July 9).

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

3.2.11 Mitigation Measure #11 – Pallid Bat and Townsend's Bat

To minimize or avoid project related effects on pallid bat and Townsend's bat, the following measures will be implemented:

- To protect night roosting bats, work activities would be limited to one portion of the bridge structure at a time between the hours of 10:00 p.m. and sunrise, and no impact pile driving will occur during these hours.
- Airspace access to the bridge will not be completely eliminated during construction.
- Lighting used for night work will be focused specifically on the portion of the bridge actively under construction.
- Combustion equipment, such as generators or pumps, will not be parked or operated under the structure unless they are required to be in contact with the structure.
- Personnel are not to be present under the bridge during the evening and night in non-active work areas.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

3.2.12 Mitigation Measure #12 – Ring-Tailed Cat

The following measures will be implemented to minimize or avoid project related impacts on ring-tailed cat species:

- To the extent practicable, removal of large trees or riparian brush shall occur outside of the maternal denning period for ring-tailed cat (May 1 through June 30).
- If vegetation removal is to occur during the maternal denning period (May 1 through June 30), a biologist shall conduct a pre-construction survey of the project area to locate maternity dens and identify measures to protect the maternity dens from disturbance. The pre-construction survey will be performed no more than 14 days prior to vegetation removal.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

3.2.13 Mitigation Measure #13 – White-Footed Vole

The following measure will be implemented to minimize or avoid project related impacts to white-footed vole species:

- A biologist shall conduct a pre-construction survey of the project area to locate and identify potential presence of these species.

- If these species are present, the biologist will recommend mitigation measures to minimize or avoid project related impacts to these species.

  Timing/Implementation: Prior to and during construction
  Enforcement: CDFW
  Monitoring: County and its contractor

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
V. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion of Impacts

a, b) **Less than Significant with Mitigation Incorporated.** Caltrans and the County have worked with the Yurok Tribe Cultural Resources Division to identify and document the project's potential to affect historical resources. In 2020, the Yurok Tribe Cultural Resources Division provided the Cultural Clearance Report (Yurok Tribe Cultural Resources Division 2020), while Caltrans prepared a Historic Property Survey Report (Caltrans 2021b). Both reports were provided to the Yurok Tribal Heritage Preservation Officer in early 2021, requesting concurrence in part, that no Historic Properties would be affected by project implementation. Although concurrence is pending, both the Cultural Clearance Report and the Historic Property Survey Report concluded that there are no recorded historic sites or resources of significant value in the project area. In accordance with Section 106 of the National Historic Preservation Act and CEQA Article 5, subsection 15064.5, no historic or known cultural properties would be affected by project implementation. *Mitigation Measure #14 – Cultural Resources* (described in Section 3.2.14) will require the use of cultural monitoring during construction to reduce the potential for impacts on cultural resources. The Yurok Tribe Cultural Resources Division will provide cultural monitoring of construction activities to ensure no significant impacts on cultural resources occur if unknown resources are discovered during earth moving activities. Project operation would have no impact on cultural resources.

c) **Less than Significant with Mitigation Incorporated.** Human remains were not identified during the cultural study; however, the potential for encountering human remains during project construction can never be entirely ruled out. State law prescribes protective measures that must be taken if any subsurface human remains are discovered. *Mitigation Measure #14 – Cultural Resources* (described in Section 3.2.14) will require the use of cultural monitoring during construction to reduce the potential for impacts on cultural resources, including the inadvertent discovery of human remains. Cultural monitoring will be provided by the Yurok Tribe Cultural Resources Division during construction activities and if remains are discovered, all necessary steps will be taken to protect them in accordance with the Yurok Tribe's

Standard Operating Procedure for Inadvertent Discoveries of Archaeological Remains and County's standard inadvertent discovery condition.

Mitigation Measures

3.2.14 Mitigation Measure #14 – Cultural Resources

The following measure will be implemented to minimize or avoid project related impacts on cultural resources:

- A cultural monitor will be required to be present for all project activities when the contractor is working at Hunter Creek bridge and all work shall stop in the area if cultural materials are encountered. If concealed or previously unknown historic and archaeological resources and remains are discovered during project implementation, all necessary steps will be taken to protect them in accordance with the Yurok Tribe's *Standard Operating Procedure for Inadvertent Discoveries of Archaeological Remains* and County's standard inadvertent discovery condition.

  Timing/Implementation: During construction
  Enforcement: SHPO, Yurok Tribe, and County
  Monitoring: Yurok Tribe, County and its contractor

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VI. ENERGY — Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	☐	☐	☐	☒

Discussion of Impacts

a, b) **No Impact.** It would be necessary to use gasoline and diesel-powered equipment during project construction. This would not be considered wasteful, inefficient, or unnecessary consumption of energy resources and would only occur for short periods of time throughout the construction period. The project will comply with state and County plans for energy efficiency. Project operation would be consistent with existing conditions.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VII. GEOLOGY AND SOILS — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
c) Be located on strata 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?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Discussion of Impacts

a, i-iv) **No Impact.** No faults pass through the project area, and the site is not within an Alquist-Priolo fault zone for fault-rupture hazard (DOC 2021b). Earthquake-related ground shaking may occur during design of life structures onsite. However, the risk of seismic activity occurring would not change from current conditions with the implementation of the project, and the project would not expose people or structures to seismic ground shaking or seismic-related ground failure. The potential for landslides to occur within the project area is low, with a possible exception of local bank instability. The project design includes stabilization methods such as RSP to ensure soil stability. Additionally, the proposed project would be built in accordance with Caltrans' Seismic Design Criteria and Bridge Design Specifications, which would ensure that the new structure can withstand seismic events. Implementation of the project would not increase the likelihood of landslides or expose people to substantial adverse effects from landslides.

b) **Less than Significant with Mitigation Incorporated.** Construction of the new bridge would result in soil disturbance in portions of the project area. Project designs and geotechnical considerations would reduce soil erosion. Overall, soil loss would be minimal with implementation of standard construction practices for dust control and stormwater pollution prevention. Erosion and sediment control measures described in *Mitigation Measure #4—Erosion and Sedimentation Control* (described in Section 3.2.4) will be used during construction to minimize the potential for erosion. The measure also includes BMPs such as RSP to ensure scour protection of abutments from Hunter Creek. Implementation of the project's SWPPP would also reduce soil loss. Project operation would be consistent with existing conditions. The potential for soil erosion and loss of topsoil as a result of project implementation would be less than significant.

c,d) **Less Than Significant Impact.** The project area soils are made up of Weott, Arlynda, Worswick-Arlynda, and Pistolriver which all have a 0 to 2 percent slope, are very poorly to somewhat poorly drained, and more than 80 inches to restrictive features. The bridge would be designed and constructed in accordance with current AASHTO requirements, the hydraulic design criteria established by Caltrans, and Caltrans bridge design specifications and seismic design criteria. The bridge design requirements would ensure that the project is not located on unstable or expansive soils.

e) **No Impact.** The project does not involve septic or wastewater systems.

f) **No Impact.** There are no unique paleontological or geologic features in the project area.

Mitigation Measures

Mitigation Measure #4—Erosion and Sedimentation Control (described in Section 3.2.4) will be used to avoid or reduce project-related impacts to a less-than-significant level.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS — Would the Project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☒	☐	☐
b) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion of Impacts

a) **Less than Significant with Mitigation Incorporated.** Greenhouse gas (GHG) emissions from the project would be generated offsite from the production of project materials, as well as onsite construction-related equipment emissions. While the project would have an incremental contribution in the context of the county and region, construction-related GHG emissions would be short term and minor. *Mitigation Measure #1—Air Quality/ Dust Controls* (described in Section 3.2.1) were incorporated into the project

design to avoid or minimize construction-related GHG emissions. Project operation would be consistent with existing conditions.

b) **Less Than Significant Impact.** The State of California has adopted several regulations related to GHG emissions reduction. These include efforts to reduce tailpipe emissions and diesel exhaust produced by fuel-combustion engines. Project construction and operation would adhere to statewide efforts aimed at minimizing GHG emissions and therefore would not conflict with any applicable plans, policies, or regulations adopted for reducing the emission of GHGs. The project would have a less than significant impact.

Mitigation Measures

Mitigation Measure #1—Air Quality/Dust Controls (described in Section 3.2.1) will be used to avoid or reduce project-related impacts to a less-than-significant level.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
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?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
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?	☐	☐	☐	☒
e) For a project located within an airport land use compatibility plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Discussion of Impacts

a, b) **Less than Significant with Mitigation Incorporated.** Hazardous materials would not be stored onsite. Construction could pose a potential hazard to the public and the environment through the use of diesel- or gasoline-powered construction equipment (e.g., trucks, excavators) and lubricants such as oil and hydraulic fluids. The potential for such hazards would be temporary since equipment would be routinely maintained and inspected to avoid leaks, and this is similar to the impacts associated with the vehicles operating daily on nearby roads. BMPs described in *Mitigation Measure #5—Prevention of Accidental Spills of Pollutants* (described in Section 3.2.5) would further reduce the potential impacts associated with the accidental spills of pollutants (e.g., fuel, oil, grease) during construction and operation. The potential for project construction to create a significant hazard to the school due to the temporary use of hazardous materials would be less than significant. Project operation would be consistent with existing conditions.

Analyses of potential sources of hazardous materials—asbestos containing building materials, aerially deposited lead in soils, lead and chromium in road striping paint, and lead-based painted bridge surfaces—were conducted during preparation of the project's Initial Site Assessment (Crawford and Associates 2021). Asbestos containing building materials, aerially deposited lead in soils, and lead-based paint were not detected; lead and chromium was found, but at concentrations far below hazardous waste thresholds. The potential for naturally occurring asbestos in the project area is low.

The existing bridge's age (circa 1939) increases its potential to contain chemically treated wood waste, specifically its wood pilings (Crawford and Associates 2021). Although these pilings were not tested, it should be assumed that the wood has been chemically treated. Similarly, wood posts used for traffic signs at the bridge are chemically treated. Accordingly, *Mitigation Measure #15 – Treated Wood Waste* (described in Section 3.2.15) will be used to minimize the potential for public and construction personnel exposure to potentially hazardous wood waste generated by dismantling the existing bridge and road signage.

c) **Less than Significant with Mitigation Incorporated.** Margaret Keating Elementary School is located within one-quarter mile of the project site and is located across US 101 from the project site. The proposed project would emit hazardous emissions; however, it would be temporary and only occur during construction of the proposed project. BMPs described in *Mitigation Measure #1 – Air Quality/Dust Control* (described in Section 3.2.1) and *Mitigation Measure #5 – Prevention of Accidental Spills of Pollutants* (described in Section 3.2.5) will reduce potential impacts from hazardous emissions produced during construction and accidental spills of hazardous materials. The potential for project construction to create a significant public hazard due to the transport of hazardous materials would be less than significant. Project operation would be consistent with existing conditions.

d) **No Impact.** Review of the California Department of Toxic Substances Control EnviroStor database (California Department of Toxic Substances Control 2021) and the State Water Resources Control Board GeoTracker database (State Water Resources Control Board 2021) found no record of any known contaminated sites, regulated landfill sites, underground tank sites, or hazardous-waste generators in the project vicinity. The project area is not included on the list of hazardous materials sites compiled pursuant

to Government Code Section 65962.5. No potential hazardous materials or waste sites are listed in the project vicinity.

e) **No Impact.** No airports are located near the project area. The project would have no impact on public or private airports or present a safety hazard for people working or residing in the project area.

f) **No Impact.** The construction of the bridge replacement project would require temporary closure of lanes on the Hunter Creek Bridge but would not completely close the bridge as the road provides the only access to the community of Requa. Construction would reduce existing Hunter Creek bridge to single lane traffic control and would construct a temporary detour road adjacent to Requa Road on the northeast end of the existing bridge. The project would not impair implementation of nor physically interfere with an adopted emergency response plan or emergency evacuation plan because vehicular access would be maintained through detours or traffic control throughout construction. Project operation would be consistent with existing conditions.

g) **Less than Significant with Mitigation Incorporated.** The project area is mapped as being in a state responsibility area with “moderate” to “high” wildfire hazard potential by California Department of Forestry and Fire Protection (CALFIRE) and is designated “non-burnable” by the United States Forest Service (USFS) (CALFIRE 2007; USFS 2020). The use of construction equipment in and around vegetated areas increases the potential for wildfire ignition. *Mitigation Measure #16—Wildfire Potential* (described in Section 3.2.16) would further reduce the risk of wildfire associated with project construction. The potential for accidental wildfire ignition during construction would be less than significant. Project operation would be consistent with existing conditions and would not increase the potential for wildfire ignition.

Mitigation Measures

3.2.15 Mitigation Measure #15 – Treated Wood Waste

The County shall include provisions in the construction bid documents to ensure the proper removal and disposal of treated wood waste material found on the existing bridge. The following measure shall be implemented to reduce construction-related environmental impacts that could result from treated wood waste removal:

- The contractor will remove treated wood waste following the alternative management standards specific under Caltrans Special Standard Provision 14-11.14 for treated wood waste, as well as California Code of Regulations Title 22, Division 4.5, Chapter 34, Sections 67386.1 through 67386.12 for labeling, accumulation, offsite shipment tracking, notification, treatment, and disposal. All personnel that may come into contact with treated wood waste will receive, at a minimum, training on safe handling, sorting and segregating, storage, labeling (including date), and proper disposal methods.

Timing/Implementation:	During construction
Enforcement:	Caltrans, County
Monitoring:	County and its contractor

3.2.16 Mitigation Measure #16 – Wildfire Prevention

Construction contract documents include measures to minimize project-related potential for wildfire ignition:

- Per the requirements of PRC Section 4442, the County will include a note on all construction plans that internal combustion engines will be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.

  Timing/Implementation: During construction
  Enforcement: County
  Monitoring: County and its contractor

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality??	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
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;	☐	☒	☐	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☒	☒	☐
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	☐	☒	☐	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

Discussion of Impacts

a) **Less than Significant with Mitigation Incorporated.** The project would involve ground disturbance and other activities that could discharge pollutants in storm water runoff. Project construction would not alter the existing topography or existing drainage patterns in a way that would result in increased erosion, surface runoff, flooding on- or offsite, or otherwise degrade water quality. Construction and operation of the project would involve the minor use of hazardous materials (i.e., petroleum-based fuels and lubricants) for fueling and maintenance of equipment away from any waterways. Implementation of *Mitigation Measure #4—Erosion and Sediment Controls* (described in Section 3.2.4) and *Mitigation Measure #5—Prevention of Accidental Spills of Pollutants* (described in Section 3.2.5) that require the preparation of an SWPPP would further reduce potential impacts on water quality; project-related impacts on water quality would remain less than significant.

b) **No Impact.** The proposed project would not require the use of any groundwater and would not substantially decrease groundwater supplies. The project would not interfere substantially with groundwater recharge and there would be no impact.

c i-iv) **Less than Significant with Mitigation Incorporated.** The proposed project would not result in substantial erosion or siltation on- or off-site. The project will implement *Mitigation Measure #4 – Erosion and Sediment Control* (described in Section 3.2.4) to minimize impacts from project related erosion. The project would slightly alter the existing drainage pattern of the site. Stormwater treatment is anticipated at the northeast and northwest areas of the project site. Water from the bridge deck and roadway will be piped to detention basins located within the Hunter Creek floodplain but outside of the normal flow areas. The project would not result in alterations of the course of the streams located throughout the project area and would not substantially increase the rate or amount of surface runoff in a manner that could result in flooding. There would be a less than significant impact.

During construction of the project, *Mitigation Measure #5 – Prevention of Accidental Spills* (described in Section 3.2.5) will be implemented to ensure that polluted runoff from project construction do not enter the waterways surrounding the project area. The project would not substantially alter the existing drainage patterns or substantially increase the amount of surface runoff. The new bridge structure would be built to have a bridge deck elevation slightly higher than the 100-year Klamath River backwater elevation. The project would not substantially alter drainage patterns and would not impede or redirect flood flows.

d) **Less Than Significant Impact.** The project area is in a flood and tsunami hazard area. The area around Hunter Creek has a long history of flooding with historic floods. Requa Road is inundated during major storm events and the Yurok Tribe has expressed a desire to raise the grade of Requa Road so that the road remains passable during flood events. Thus, the hydraulic design criteria established in the Caltrans Local Procedures Manual has been incorporated into the project design to ensure that the new structure would be capable of conveying the base or 100-year flood. The County, in conjunction with Caltrans, has elected to set the minimum bridge deck elevation slightly higher than the 100-year Klamath River backwater elevation. The soffit elevation would be set to convey the Hunter Creek 100-year flood and would pass the Hunter Creek 50-year flood with adequate freeboard. The project area is within the tsunami zone due to its proximity to the Pacific Ocean and Klamath River (Del Norte County 2021). The project has also been designed to accommodate tsunami loading as defined by Caltrans. Therefore, the

structure would be able to withstand flooding and tsunami hazards and would not risk the release of pollutants due to project inundation.

e) **No Impact.** Construction and operation of the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Mitigation Measures

Mitigation Measure #4—Erosion and Sediment Controls (described in Section 3.2.4) and *Mitigation Measure #5—Prevention of Accidental Spills of Pollutants* (described in Section 3.2.5) will be used to avoid or reduce project-related impacts to a less-than-significant level.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XI. LAND USE AND PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion of Impacts

a) **No Impact.** The project would not divide an established community. Construction would be temporary, and roads would remain passable through detours on nearby alternate roads and traffic control.

b) **No Impact.** Due to the realignment of the new bridge slightly downstream, some permanent ROW acquisition would be required. However, this would not result in a significant impact due to conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Impacts would be less than significant.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XII. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource classified MRZ-2 by the State Geologist that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion of Impacts

a, b) **No Impact.** The project area has not been mapped by the California Department of Conservation Mineral Land Classification as containing marketable aggregate (DOC 2021c). Some mineral extraction activities occur within the Klamath Planning Subarea; however, those activities primarily take place on tribal trust lands (Del Norte County 2003). No mineral extraction activities occur within the project area. Project implementation would not result in the loss of availability of a valuable mineral resource.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIII. NOISE — 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?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Discussion of Impacts

a) **Less Than Significant Impact.** The Del Norte County Code and General Plan do not contain any noise restrictions or standards that would be applicable to the construction of the proposed project. All construction noise would be temporary and as there are no sensitive receptors located in the immediate vicinity of the project area, there would not be significant impacts from construction generated noise. Ambient noise associated with the project operation would be consistent with existing conditions and the proposed project would not result in a substantial temporary or permanent increase in ambient noise levels.

b) **Less Than Significant Impact.** During excavation and construction activities for the project, groundborne vibration would be produced by the heavy-duty construction equipment such as jackhammers, backhoes, and loaded trucks. All groundborne vibration and noise levels associated with the construction of the proposed project would be temporary and would not result in the generation of excessive vibration or noise levels. Project impacts related to groundborne vibration would be less than significant.

c) **No Impact.** The project is not located near an airport or private airstrip.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIV. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion of Impacts

a) **No Impact.** This project is intended to replace an existing bridge structure. The project would not induce growth and there would be no impact.

b) **No Impact.** There are no residential units in the project area and the proposed project would replace an existing bridge on Requa Road to an updated structure. The project would not displace any people or housing and there would be no impact.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XV. PUBLIC SERVICES — Would the project:				
a) 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?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Discussion of Impact

a) **No Impact.** The project would not cause substantial adverse physical impacts on government facilities or negatively affect fire and police protection, schools, parks, or public facilities. The proposed project would replace an existing bridge structure on Requa Road with a new structure and project operation would not result in changes to existing conditions. The project would have no impact on any public recreational facilities in the project area and vicinity. Although traffic control and detours would occur during construction, impacts on emergency vehicle access would not be expected. No significant adverse impacts on service ratios, response times, or service objectives for any of the public services are anticipated.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVI. RECREATION — Would the project:				
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Discussion of Impacts

a, b) **No Impact.** The project would not increase the usage of the park and would not construct or expand recreational facilities.

Mitigation Measures

No project-specific mitigation is required under this subject.

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

Discussion of Impacts

a) **No Impact.** The project is not anticipated to increase either the number of vehicle trips, volume-to-capacity ratio, or congestion at intersections in the project area or vicinity. The project does not conflict with any alternative transportation plan or policy. The project is consistent with the transportation goals and policies of the Del Norte County General Plan.

b) **No Impact.** The primary purpose of the project is to replace an existing bridge structure. The project would have no impact on vehicle miles traveled since nearby detours would be similar in length. The project would not conflict with Section 15064.3, subdivision (b).

c) **No Impact.** The project would not result in the creation of sharp curves, dangerous intersections, or incompatible uses.

d) **No Impact.** Construction would result in the need for temporary lane closures on the existing roadway. Construction activities would reduce the existing Requa Road Bridge to single lane traffic control with temporary stop or signal control and through traffic would be allowed. Traffic control measures such as signage would be used to route traffic flow around the project activities and to detour routes. The project would not result in inadequate emergency access.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES — Would the project: cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion of Impacts

a) **No Impact.** Caltrans and the County have worked with the Yurok Tribe Cultural Resources Division to identify and document the project's potential to affect historical resources. There are no tribal cultural resources listed or eligible for listing on the California Register of Historical Resources or in a local register of historical resources as defined in PRC Section 5020.1(k) (Yurok Tribe Cultural Resources Division 2020; Caltrans 2021b).

b) **Less Than Significant With Mitigation Incorporated.** The project area is within the boundaries of the Yurok Tribe and the Yurok Tribe was contacted to provide consultation for this project. Onsite

surveys, consultation with the Yurok Tribe, and database reviews conducted for the project found that no cultural resources are present within the project area (Yurok Tribe Cultural Resources Division 2020; Caltrans 2021b). However, undiscovered cultural resources could be unearthed during construction activities. *Mitigation Measure #14 – Cultural Resources* (described in Section 3.2.14) will require the use of cultural monitoring during construction to reduce the potential for impacts on cultural resources. The Yurok Tribe Cultural Resources Division will provide cultural monitoring of construction activities to ensure no significant impacts on cultural resources occur if unknown resources are discovered during earth moving activities. Project operation would have no impact on tribal cultural resources.

Mitigation Measures

Mitigation Measure #14—Cultural Resources (described in Section 3.2.14) will be used to avoid or reduce project-related impacts to a less-than-significant level.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion of Impacts

a) **No Impact**. The project consists of replacement of an existing bridge structure with a new structure. The project does not involve any actions that would require or result in new or expanded water, wastewater, stormwater, or other utility facilities.

b) **No Impact.** No new or expanded water entitlements would be required for the project.

c) **No Impact.** The project does not in involve any actions that would generate wastewater.

d) **Less Than Significant Impact.** Construction activities associated with the project would generate solid waste in the form of demolished materials, metal pilings, and other trash. Solid waste generated at the project site would be disposed of at a suitable facility such as the County transfer station facilities. Project operation would not generate solid waste. The contractor would be responsible for removing solid waste produced from construction from the site. Project impacts on transfer station facilities would be less than significant.

e) **Less Than Significant Impact.** Any solid waste generated by the construction of the project would be disposed of at an approved transfer station facility in compliance with local, state, and federal regulations pertaining to solid waste disposal.

Mitigation Measures

No project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XX. WILDFIRE — Would the project result in:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
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?	☐	☒	☐	☐
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 that may result in temporary or ongoing impacts to the environment?	☐	☒	☒	☐
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?	☐	☐	☐	☒

Discussion of Impacts

a) **No Impact.** Roads within the project area may have lane closures or detours during construction; however, through traffic would still be allowed as only partial lane closures are planned. The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Project operation would be consistent with existing conditions.

b, c) **Less Than Significant Impact with Mitigation Incorporated**. Based on current mapping, the lands in the project area are mapped as having “moderate” to “high” fire hazard potential by CALFIRE and the project site is designated as “non-burnable” USFS (CALFIRE 2007, USFS 2020). The project activities would not exacerbate fire risks or result in ongoing impacts to the environment. Implementation of *Mitigation Measure #15—Wildfire Potential* (described in Section 3.2.15) would further reduce the

potential for wildfire. Project operation would be consistent with existing conditions and would not result in an increase in fire risk from existing conditions.

Project construction may require relocation of existing utilities but would not require the installation of new associated infrastructure. Project operation would be consistent with existing conditions. The project's fire risk would be less than significant.

d) **No Impact.** The project would provide sufficient gradient for drainage of roadway surfaces, and as such, the project would not expose people or structures to significant risks as a result in drainage changes, runoff, or slope instability.

Mitigation Measures

Mitigation Measure #15—Wildfire Potential described in Section 3.2.15) will be used if necessary; however, no project-specific mitigation is required under this subject.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE (To be filled out by Lead Agency if required)				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Discussion of Impacts

a) **Less Than Significant with Mitigation Incorporated.** As discussed in the preceding sections, the project has a potential to impact biological resources. Although no federally listed plant species would be affected by the project, special-status wildlife and migratory birds could be impacted by construction. Mitigation measures described in the Biological Resources section will be used to avoid or minimize potential impacts on wildlife species. No cultural resources are anticipated to be impacted by project construction; however, a cultural monitor would be present onsite to monitor construction activities and

proper steps would be taken if cultural resources or human remains are discovered. The project would have no impact or a less-than-significant impact on environmental resources with mitigation measures incorporated.

b) **Less Than Significant Impact.** The project consists of replacing an existing bridge structure with a new structure. Impacts associated with the project would be primarily limited to the construction phase, with no significant operational impacts on the environment. All impacts resulting from project implementation can be fully mitigated at the project level. As a result, cumulative impacts would be less than significant.

c) **Less than Significant with Mitigation Incorporated.** As discussed in the preceding sections, the construction of the proposed project may have potential impacts on humans related to temporary impacts on air quality, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, and temporary noise increases during construction. However, all impacts are less than significant or can be mitigated to a less than significant level with implementation of project specific mitigation measures. Project operation would not cause direct or indirect adverse effects on human beings as project operation conditions would be similar to current existing conditions. The project would not involve any actions that would have a substantial direct or indirect impact on the human environment that cannot be mitigated to a less than significant level.

4.0 DETERMINATION

Based on this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "Potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ Date _____

Heidi Kunstal, CDD Director
County of Del Norte

This page intentionally left blank.

5.0 MITIGATION MONITORING AND REPORTING PROGRAM

This chapter describes the Mitigation Monitoring and Reporting Program (MMRP) for the Requa Road at Hunter Creek Bridge Replacement Project (project). The purpose of this MMRP is to memorialize the mitigation responsibilities of the County in implementing the proposed project. The mitigation measures listed herein are required by law or regulation and will be adopted by the County as part of the overall project approval. Mitigation is defined by CEQA Guidelines Section 15370 as a measure that

- *avoids the impact altogether by not taking a certain action or parts of an action;*
- *minimizes impacts by limiting the degree or magnitude of the action and its implementation;*
- *rectifies the impact by repairing, rehabilitating, or restoring the impacted environment;*
- *reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project; or*
- *compensates for the impacts by replacing or providing substitute resources or environments.*

Mitigation measures provided in this MMRP have been identified in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures of the Initial Study/Mitigated Negative Declaration (IS/MND) and are considered feasible and effective in mitigating project-related environmental impacts.

This MMRP includes discussions of the following: legal requirements, the intent of the MMRP; the development and approval process for the MMRP; the authorities and responsibilities associated with implementation of the MMRP; a method of resolution of noncompliance complaints; and a summary of monitoring requirements.

Legal Requirements: The legal basis for the development and implementation of the MMRP lies within CEQA (including the California Public Resources Code (PRC). PRC Sections 21002 and 21002.1 state the following:

> *Public agencies are not to approve projects as proposed if there are feasible alternatives or feasible mitigation measures available that would substantially lessen the significant environmental effects of such projects.*
>
> *Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.*

Section 21081.6 of the California Public Resources Code further requires the following:

> *The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.*
>
> *The monitoring program must be adopted when a public agency makes its findings under CEQA so that the program can be made a condition of project approval in order to mitigate significant effects on the environment. The program must be designed to ensure compliance with mitigation measures during project implementation to mitigate or avoid significant environmental effects.*

Intent of the Mitigation Monitoring and Reporting Program: The MMRP is intended to satisfy the requirements of CEQA as they relate to the project. It will be used by the County, participating agencies, project contractors, and mitigation monitoring personnel during implementation of the project. The primary objective of the MMRP is to ensure the effective implementation and enforcement of adopted mitigation measures and permit conditions. The MMRP will provide for monitoring of construction activities as needed, onsite identification and resolution of environmental problems, and proper reporting to lead agency staff.

Development and Approval Process: The timing elements for implementing mitigation measures and the definition of the approval process are provided in detail throughout this MMRP to assist the County by providing the most usable monitoring document possible.

Authorities and Responsibilities: Del Norte County, functioning as the CEQA Lead Agency, will have the primary responsibility for overseeing the implementation of the MMRP and will be responsible for the following activities:

- coordination of monitoring activities
- reviewing and approving status reports
- maintenance of records concerning the status of all approved mitigation measures

As the implementing agency, the County is responsible for implementing the mitigation measures by incorporating them into the project specifications (contract documents) and enforcing the conditions of the contract in the field during construction. Some pre- and post-construction activities may be implemented directly by the County.

Resolution of Noncompliance Complaints: Any person or agency may file a complaint that alleges noncompliance with the mitigation measure(s) adopted as part of the approval process for the proposed project. The complaint would be directed to Del Norte County in written form describing the purported violation in detail. The County would investigate and determine the validity of the complaint. If noncompliance with a mitigation measure is verified, the County would take the necessary action(s) to remedy the violation.

Summary of Monitoring Requirements: Following this discussion are the mitigation measures and associated monitoring requirements for the proposed project. Mitigation measures include standard BMPs that will be used during construction and are organized by environmental issue area (e.g., Air Quality, Biological Resources).

- Mitigation Measures: describes the schedules of activities, prohibitions of practices, maintenance procedures, and structural or managerial practices, that will be used either singly or in combination to prevent or reduce the release of pollutants, or otherwise minimize the potential for adverse effects on environmental resources. Mitigation measure(s) were identified for each potentially significant impact discussed in the IS/MND. The same mitigation numbering system used in the Initial Study/Mitigated Negative Declaration (IS/MND) is carried forward in this Mitigation Monitoring and Reporting Program (MMRP).

- Timing/Implementation: Indicates at what point in time or project phase the mitigation measure will need to be implemented.

- Enforcement: Indicates which agency or entity is responsible for enforcement of the mitigation measure(s).
- Monitoring: Indicates which agency or entity is responsible for implementing and monitoring each mitigation measure.
- Verification: Provides a space to be signed and dated by the individual responsible for verifying compliance with each mitigation measure.

5.1 MITIGATION MEASURES

This MMRP includes the following mitigation measures to be implemented during construction of the project:

5.1.1 Mitigation Measure #1 – Air Quality/Dust Control

The following measures will be implemented to avoid or minimize the potential for adverse impacts on air quality:

- The County shall include provisions in the construction bid documents that the contractor shall implement a dust control program to limit fugitive dust emissions. The dust control program shall include, but not be limited to, the following elements, as appropriate:
    - Water inactive construction sites and exposed stockpile sites at least twice daily, including during non-workdays or until soils are stable.
    - Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles, These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used.
    - Equipment or manual watering shall be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

      Timing/Implementation: During construction
      Enforcement: County
      Monitoring: County and/or its contractor

5.1.2 Mitigation Measure #2 – Special Status Fish Species

The following measures outlined in the *Natural Environment Study* (Stantec 2021c) and draft *Biological Assessment/Essential Fish Habita*t (Stantec 2020d) will be implemented to avoid or minimize the potential for significant impacts on special-status fish species:

- Use of open channel stream diversion and protection measures in Hunter, Panther, and Minot creeks during bridge construction and demolition operations to isolate construction areas from stream channels and maintain aquatic habitat connectivity and unimpeded fish passage for juvenile coho salmon, steelhead trout, and cutthroat trout using the streams for summer rearing habitat.

- Biological monitoring during installation of stream diversion/protection measures to salvage and relocate fish from portions of stream channels that may be dewatered by these diversions.
- Hydroacoustic monitoring during impact pile driving and hoe-ram demolition during bridge removal to prevent exceedance of adverse underwater sound pressure levels (i.e., 206 dB peak, 187 dB cumulative sound exposure level [cSEL]).
- Minimizing use of impact pile driving for 60-inch cast-in-steel-shell foundation piles to only that necessary to achieve final design tip elevations. Engineering analysis demonstrates that a combination of vibratory and impact pile driving would be applicable for geologic conditions in the project area.
- Installation of aquatic habitat structures (e.g., habitat logs, rootwads, boulders) to create, restore, and enhance formation of channel pools and maintain habitat complexity in the project area.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

5.1.3 Mitigation Measure #3 – Limited Operations Period

- To protect the most vulnerable life staged of sensitive fish species occurring within the project area, in-stream work would be restricted to the period between June 15 and October 15. This seasonal work window would avoid the salmon spawning season as it correlates to a period of the year when juvenile salmonid abundance is at its lowest and eulachon would be absent. This work window also avoids the late fall-winter migration period for adult salmon that may migrate through the project area and vicinity to upstream spawning grounds, and the peak spring to early summer smolt out-migration. Construction activities performed outside of the bed, channel, or bank of a stream that have the potential to directly impact surface waters (i.e., soil disturbance that could cause turbidity) would be performed during the dry season, typically between June through October, or as weather permits per the approved Contractor-prepared Storm Water Pollution Prevention Plan (SWPPP) and/or other project permit requirements.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

5.1.4 Mitigation Measure #4 – Erosion and Sedimentation Control

Erosion control measures will be implemented during construction of the proposed project. These measures will conform to the provisions in Section 21 of the Caltrans Standard Specifications (2018) and any special provisions included in the contract for the proposed project. Such provisions include the preparation of a SWPPP, which will describe and illustrate the types and locations of best management practices (BMPs) in the proposed project site to be implemented based on local conditions and would require regular inspections and a Rain Event Action Plan.

Erosion control measures to be included in the SWPPP or to be implemented by the County will include the following:

- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the summer and early fall period to minimize the potential for stormwater transport of sediment to surface water features. Instream construction will be restricted to June 15 to October 15. Upland construction activities that must take place during the late fall, winter, or spring (e.g., vegetation removal prior to avian nesting periods) will use temporary erosion and sediment control structures that shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are installed, if necessary.
- Areas where wetland and upland vegetation need to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved by the County. Exclusionary fencing will be installed around areas that do not need to be disturbed.
- Approved fabric barriers will be installed to prevent the discharge of contaminants (e.g., sediment, oil, and grease), when equipment is working adjacent to or over waterways.
- Within 10 days of completion of construction in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, weed-free mulch shall be applied to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, weed-free mulch shall be applied to all exposed areas upon completion of the day's activities. Soils shall not be left exposed during the rainy season.
- Suitable BMPs, such as silt fences, straw wattles, or catch basins, shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures will be installed prior to any clearing or grading activities. Any sediment built up at the base of BMPs will be removed before BMP removal to avoid any accumulated sediments from being mobilized post-construction.
- Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated with native species.
- Any new or previously excavated gravel material placed in the channel shall meet Caltrans' cleanness test indicating the relative proportions of clay-sized material clinging to coarse aggregate and screenings (California Test No. 227) with a value of 85 or higher (excluding such materials as soils in the RSP to allow for riparian planting).
- All dewatering activities will be conducted in compliance with the Caltrans Field Guide for Construction Site Dewatering and Section 13-4.03G of the Caltrans Standard Specifications. Water removed from the channels for temporary diversions or excavations required for installation or removal of culverts will be pumped to a temporary sediment retention basin outside of the channel, through a mechanized water filtration system, or into Baker tanks or similar storage system and trucked offsite to an authorized disposal site. If a temporary basin is constructed, it shall be located outside of the active channel and include sediment sock or similar sediment control on the discharge.

Timing/Implementation:	Prior to and during construction
Enforcement:	Caltrans, County

Monitoring:	County and its contractor

5.1.5 Mitigation Measure #5 – Prevention of Accidental Spills

The proposed SWPPP will include a waste management section that provides procedural and structural BMPs for collecting, handling, storing, and disposing of waste generated by project construction and to prevent the accidental release of pollutants. The contractor would also be required to submit a demolition and debris containment and management plan to the Resident Engineer for approval prior to bridge demolitions. All construction will be completed according to the most recent Caltrans Site Best Management Practices Manual to protect water quality including, but not limited, to the following measures:

- A site-specific spill prevention plan to be included in the SWPPP shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms will be constructed to prevent spilled materials from reaching surface water features.
- Equipment and hazardous materials will be stored in the staging area 500 feet to the west and away from surface water features.
- Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in the staging area 500 feet away from Hunter Creek or within an adequate fueling containment area, at least 50 feet away from all streams.
- Equipment operating within the ordinary high water mark shall use non-toxic vegetable oil for operating hydraulic equipment instead of traditional hydraulic fluids.
- Minimize sand and gravel from new asphalt getting into storm drains, streets, and creeks by sweeping. Old or spilled asphalt must be recycled or disposed as approved by the Resident Engineer.
- All project materials will be prevented from entering streams. Silt fences will be installed until soils are stabilized or permanent controls are in place.

Timing/Implementation:	Prior to and during construction
Enforcement:	Caltrans, County
Monitoring:	County and its contractor

5.1.6 Mitigation Measure #6 – Replacement of Lost Riparian Habitat

The following measures shall be implemented to reduce potential impacts to riparian habitat in the project area:

- The width of the construction disturbance zone within the riparian habitat shall be minimized through careful pre-construction planning.
- Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to minimize impacts to riparian vegetation outside of the construction area are minimized.
- Onsite restoration shall occur in areas that have been disturbed during project construction. All native woody plants (>6 inches in diameter) removed shall be replanted with new plantings at a

minimum 3:1 ratio. This replanting ratio will help establish at least one vigorous plant for each plant removed.

- Plant spacing intervals will be determined as appropriate based on-site conditions following construction and will be similar to undisturbed riparian habitat in the local area.
- Revegetation monitoring will be implemented in compliance with regulatory permit conditions and be initiated immediately following completion of the planting. The monitoring surveys will consist of a general site walkthrough evaluating the survival and health of riparian plantings, signs of drought stress, weed or herbivory problems, and the presence of trash or other debris. The mitigation will be considered successful if one native woody plant (>6-inch diameter) survives for every native woody plant (>6-inch diameter) removed. If any "volunteer" native species occur in disturbed areas, they can contribute to the replacement numbers for the success criteria. Annual monitoring and reporting of performance of riparian wetland mitigation will be conducted for a minimum period of three years following construction. If monitoring results indicate that revegetation efforts are not meeting established success criteria, corrective measures would be implemented.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

5.1.7 Mitigation Measure #7 – Prevention of Spread of Invasive Species

The following measures will be implemented to prevent the spread of invasive species:

- All equipment used for construction activities will be inspected, cleaned, and verified to be weed-free prior to entering the project area.
- If project implementation calls for mulches or fill, they will be certified to be weed-free.
- Seed mixes or other vegetative material used for re-vegetation of disturbed sites will consist of locally adapted native plant materials.
- Gravels, concrete blocks, and other materials used for the temporary stream diversions shall be obtained locally for gravels or properly and thoroughly cleaned to remove silt and encrusted materials prior to installation.
- Construction equipment (including boots/waders and hand tools) that may enter stream courses shall be properly disinfected or cleaned according to guidance provided by the State of California Aquatic Invasive Species Management Plan (CDFG 2008, U.S. Bureau of Reclamation 2012) prior to instream work to prevent the spread of aquatic invasive species.

Timing/Implementation:	Prior to and during construction
Enforcement:	Caltrans, County
Monitoring:	County and its contractor

5.1.8 Mitigation Measure #8 – Special Status Amphibian and Reptile Species

The following measures will be implemented to avoid or minimize the potential for adverse impacts on special-status amphibians and reptiles.

- A biologist will provide environmental awareness training for construction personnel prior to onset of work. The training will instruct construction personnel on how to recognize potential special status species.
- To avoid potential injury or mortality to individual special status species, vegetation clearing (i.e., removal of small trees, shrubs, rush, and tall dense grasses) will be done manually using hand tools (e.g., chainsaw, lopper, weed trimmer). The vegetation will be cut to ground level and be removed from the work area by hand.
- If special status species are encountered in the project area during construction and could be harmed by construction activities, work will stop in the area and the County will notify California Department of Fish and Wildlife (CDFW). Upon authorization from CDFW, a biologist may relocate the individual(s) the shortest distance possible to a location containing habitat outside of the work area.
- If a western pond turtle nest is discovered during construction activities, a biologist will flag the site and determine if construction activities can avoid affecting the nest. If the nest cannot be avoided, it will be excavated ad relocated to a suitable location outside of the construction impact zone by a biologist in coordination with CDFW. The County will inform Caltrans when such an activity occurs.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

5.1.9 Mitigation Measure #9 – Special Status Birds and Migratory Birds and Raptors

The following measures will be implemented to avoid or minimize the potential for adverse impacts on nesting special status birds and migratory birds and raptors:

- If all necessary approvals have been obtained, potential nesting substrate (e.g., shrubs and trees) that will be removed by the project should be removed before the onset of the nesting season (February 1 through August 31), if practicable. This will help preclude nesting and substantially decrease the likelihood of direct impacts.
- If construction occurs during the nesting season (February 1 through August 31), a biologist shall conduct a pre-construction survey of the project area including a 500-foot buffer for white-tailed hawk and all other raptor species, and a 250-foot buffer for all other species, as access is available, to locate active bird nests and identify measures to protect the nests. The pre-construction survey will be performed between February 1 and August 31, but no more than 14 days prior to the implementation of construction activities (including staging and equipment

access). If a lapse in construction activities for 14 days or longer occurs between those dates, another pre-construction survey will be performed.

- If an active nest if found, a biologist (in consultation with the California Department of Fish and Wildlife) will determine the extent of a construction-free buffer zone to be established around the nest. The County will inform Caltrans when such an activity occurs.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW, Caltrans, County
Monitoring:	County and its contractor

5.1.10 Mitigation Measure #10 – Northern Spotted Owl

To minimize or avoid project related effects on nesting northern spotted owl, the following measure will be implemented:

- Construction that creates project-generated sound that exceeds 20 dB over ambient sound levels or 90 dB total including ambient level will not occur during the northern spotted owl nesting period (February 1 through July 9).

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

5.1.11 Mitigation Measure #11 – Pallid Bat and Townsend's Bat

To minimize or avoid project related effects on pallid bat and Townsend's bat, the following measures will be implemented:

- To protect night roosting bats, work activities would be limited to one portion of the bridge structure at a time between the hours of 10:00 p.m. and sunrise, and no impact pile driving will occur during these hours.
- Airspace access to the bridge will not be completely eliminated during construction.
- Lighting used for night work will be focused specifically on the portion of the bridge actively under construction.
- Combustion equipment, such as generators or pumps, will not be parked or operated under the structure unless they are required to be in contact with the structure.
- Personnel are not to be present under the bridge during the evening and night in non-active work areas.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

5.1.12 Mitigation Measure #12 – Ring-Tailed Cat

The following measures will be implemented to minimize or avoid project related impacts on ring-tailed cat species:

- To the extent practicable, removal of large trees or riparian brush shall occur outside of the maternal denning period for ring-tailed cat (May 1 through June 30).
- If vegetation removal is to occur during the maternal denning period (May 1 through June 30), a biologist shall conduct a pre-construction survey of the project area to locate maternity dens and identify measures to protect the maternity dens from disturbance. The pre-construction survey will be performed no more than 14 days prior to vegetation removal.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

5.1.13 Mitigation Measure #13 – White-Footed Vole

The following measure will be implemented to minimize or avoid project related impacts to white-footed vole species:

- A biologist shall conduct a pre-construction survey of the project area to locate and identify potential presence of these species.
- If these species are present, the biologist will recommend mitigation measures to minimize or avoid project related impacts to these species.

Timing/Implementation:	Prior to and during construction
Enforcement:	CDFW
Monitoring:	County and its contractor

5.1.14 Mitigation Measure #14 – Cultural Resources

The following measure will be implemented to minimize or avoid project related impacts on cultural resources:

- A cultural monitor will be required to be present for all project activities when the contractor is working at Hunter Creek bridge and all work shall stop in the area if cultural materials are encountered. If concealed or previously unknown historic and archaeological resources and remains are discovered during project implementation, all necessary steps will be taken to protect them in accordance with the Yurok Tribe's *Standard Operating Procedure for Inadvertent Discoveries of Archaeological Remains* and County's standard inadvertent discovery condition.

Timing/Implementation:	During construction
Enforcement:	SHPO, Yurok Tribe, and County
Monitoring:	Yurok Tribe, County and its contractor

5.1.15 Mitigation Measure #15 – Treated Wood Waste

The County shall include provisions in the construction bid documents to ensure the proper removal and disposal of treated wood waste material found on the existing bridge. The following measure shall be implemented to reduce construction-related environmental impacts that could result from treated wood waste removal:

- The contractor will remove treated wood waste following the alternative management standards specific under Caltrans Special Standard Provision 14-11.14 for treated wood waste, as well as California Code of Regulations Title 22, Division 4.5, Chapter 34, Sections 67386.1 through 67386.12 for labeling, accumulation, offsite shipment tracking, notification, treatment, and disposal. All personnel that may come into contact with treated wood waste will receive, at a minimum, training on safe handling, sorting and segregating, storage, labeling (including date), and proper disposal methods.

Timing/Implementation:	During construction
Enforcement:	Caltrans, County
Monitoring:	County and its contractor

5.1.16 Mitigation Measure #16 – Wildfire Prevention

Construction contract documents include measures to minimize project-related potential for wildfire ignition:

- Per the requirements of PRC Section 4442, the County will include a note on all construction plans that internal combustion engines will be equipped with an operational spark arrester, or the engine must be equipped for the prevention of fire.

Timing/Implementation:	During construction
Enforcement:	County
Monitoring:	County and its contractor

This page intentionally left blank.

6.0 REPORT PREPARATION

6.1 COUNTY OF DEL NORTE, CEQA LEAD AGENCY

Heidi Kunstal	CDD Director
Jim Barnts	County Engineer
Rosanna Bower	Assistant County Engineer

6.2 CALIFORNIA DEPARTMENT OF TRANSPORTATION DISTRICT 1, OFFICE OF LOCAL ASSISTANCE

Darrell Cardiff	Senior Environmental Planner (Archaeologist)
Vincent Heim	Associate Environmental Planner (Archaeologist)
Julia Peterson	Associate Environmental Planner (Generalist)
Suzanne Theiss	District Local Assistance Engineer
Sara Thomas	Native American Liaison
Christa Unger	Environmental Planner (Natural Resources)

6.3 QUINCY ENGINEERING, INC., ENGINEERING CONSULTANT

Jim Foster	Principal Engineer/Project Manager
Mike Sanchez	Project Engineer

6.4 AVILA AND ASSOCIATES, DESIGN HYDRAULIC STUDY

Catherine M.C. Avila	Professional Engineer

6.5 CRAWFORD AND ASSOCIATES, INITIAL SITE ASSESSMENT

Chris Trumbull	Senior Project Manager
Stephen J. Carter	Senior Geologist

6.6 STANTEC CONSULTING SERVICES ENVIRONMENTAL COMPLIANCE SUBCONSULTANTS

Wirt Lanning	Program/Project Manager
Connie MacGregor	Environmental Analyst/Environmental Scientist
Jenny Webster	Environmental Analyst
Sarah Tona	Biologist/Botanist/Environmental Analyst
Gabe Youngblood	Biologist
Matt Gould	Biologist
David Pluth	Biologist
Teri Mooney	Geographic Information System Analyst
Sylvia Langford	Editor/Document Production

This page intentionally left blank.

7.0 REFERENCES

California Department of Fish and Game (CDFG). 2008. California Aquatic Invasive Species Management Plan. State of California Resources Agency, Department of Fish and Game. Funded in part by the Ocean Protection Council State Coastal Conservancy and U.S. Fish and Wildlife Service. January 2008.

California Department of Forestry and Fire Protection (CALFIRE). 2007. Del Norte County. Fire Hazard Severity Zones in SRA. https://osfm.fire.ca.gov/media/6665/fhszs_map8.pdf. Accessed June 2021.

California Department of Transportation (Caltrans). 2021a. California State Scenic Highway System Map. https://www.arcgis.com/apps/webappviewer/index.html?id=2e921695c43643b1aaf7000dfcc19983. Accessed June 2021.

_____. 2021b. Historic Property Survey Report for Hunter Creek Bridge Replacement (Bridge #01C-0011), Del Norte County, BRLO-5910(044). Department of Transportation, District 1 Environmental Planning. Eureka, CA. February 2021.

Crawford and Associates, Inc. Hunter Creek Bridge on Requa Road Replacement. Del Norte County, California. Federal Project No. BRLO-5901(044), Bridge No. 01CO011. Prepared for Quincy Engineering by Crawford and Associates, Inc. Sacramento, CA. January 12, 2021. Project No. 19-508.1

Del Norte County. 2003. Del Norte County General Plan. January 28, 2003. https://drive.google.com/file/d/1534R7pLyN-C0NWZ2fWOnMSsN6mN6AZPJ/view. Accessed June 2021.

_____. 2021. County of Del Norte, California. Emergency Services. Klamath Tsunami Hazard Map. https://docs.google.com/a/co.del-norte.ca.us/viewer?a=v&pid=sites&srcid=Y28uZGVsLW5vcnRlLmNhLnVzfGRuY298Z3g6N2I4YmRiODBjMDkxNzY2ZQ. Accessed June 2021.

Department of Conservation (DOC). 2021a. California Important Farmland Finder. https://maps.conservation.ca.gov/dlrp/ciff/. Accessed June 2021.

_____. 2021b. Fault Activity Map of California. https://maps.conservation.ca.gov/cgs/fam/. Accessed June 2021.

_____. 2021c. CGS Information Warehouse: Mineral Land Classification. https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc. Accessed June 2021.

Department of Toxic Substances Control. 2021. EnviroStor. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=requa+rd%2C+klmath%2C+ca. Accessed June 2021.

Mayer, K. E., and W. F. Laudenslayer, Jr., eds. 1988. A Guide to Wildlife Habitats of California. Sacramento: California Department of Forestry and Fire Protection.

North Coast Unified Air Quality Management District (NCUAQMD). 1995. North Coast Unified Air Quality Management District Particulate Matter (PM10) Attainment Plan. http://www.ncuaqmd.org/files/NCUAQMD%20Attainment%20Plan%205-95.pdf. Accessed June 2021.

Stantec Consulting, Inc. 2020a. Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project Delineation of Waters of the United States. PDF. Accessed June 2021.

_____. 2020b. Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project Delineation of Wetlands and Streams under the California Coastal Act. PDF. Accessed June 2021.

_____. 2020c. Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project Visual Resources Impact Assessment. PDF. Accessed June 2021.

_____. 2020d. Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project Biological Assessment/Essential Fish Habitat - draft. PDF. Accessed July 2021.

_____. 2020e. Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project Northern Spotted Owl and Marbled Murrelet Habitat Assessment and Auditory and Visual Disturbance Analysis Report. PDF. Accessed July 2021.

_____. 2021a. Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project Natural Environment Study. PDF. Accessed June 2021.

_____. 2021b. Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project Farmland Impact Assessment BRLO-5901(044). PDF. Accessed June 2021.

_____. 2021c. Requa Road over Hunter Creek Bridge (01C-0011) Replacement Project Natural Environment Study. PDF. Accessed June 2021.

State Water Resources Board. 2021. GeoTracker. https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=requa+rd%2C+klamath%2C+ca. Accessed June 2021.

U.S. Bureau of Reclamation. 2012. Inspection and Cleaning Manual for Equipment and Vehicles to Prevent the Spread of Invasive Species. U.S. Department of the Interior, Bureau of Reclamation, Technical Memorandum No. 86-68220-07-05. June 2012.

United States Department of Agriculture (USDA). 2021. Custom Soil Resource Report for Humboldt and Del Norte Area, California. PDF. Accessed June 2021.

United States Fish and Wildlife Service (USFWS). 2014. Programmatic Informal Consultation for the California Department of Transportation's Routine Maintenance and Repair Activities, and Small Projects Program for Districts 1 and 2.

United States Forest Service (USFS). 2020. Wildfire Hazard Potential. https://usfs.maps.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=55226e8547f84aae8965210a9801c357. Accessed June 2021.

United States Geologic Survey (USGS). 2021. Geologic Map of the United States: Interactive Map – Conterminous U.S. https://mrdata.usgs.gov/geology/state/map-us.html#home. Accessed June 2021.

Western Regional Climate Center. 2021. Klamath, California (044577). Period of Record Monthly Climate Summary. Period of Record: 07/01/1948 to 11/30/2006. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca4577. Accessed June 2021.

Yurok Tribe Cultural Resources Division. 2020. Cultural Clearance Report for the Hunter Creek Bridge Replacement. August 28, 2020.