DRAFT
Mitigated Negative Declaration

Sonoma County Permit and Resource Management Department
2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 565-1900 FAX (707) 565-1103

Publication Date:
Public Review Period:
State Clearinghouse Number:
Prepared by: David Walsh
Phone: (707) 565-2526

Pursuant to Section 15071 of the State CEQA Guidelines, this proposed Negative Declaration and the attached Initial Study, constitute the environmental review conducted by the County of Sonoma as lead agency for the proposed project described below:

Project Title: King Ridge Road Bridge crossing Austin Creek Bridge Replacement Project (Project)

Lead Agency: Sonoma County

Project Applicant/Operator: Sonoma County Public Infrastructure

Project Location/Address: King Ridge Road crossing Austin Creek

Decision Making Body: County of Sonoma Board of Supervisors

Project Description: Sonoma County Public Infrastructure proposes to replace the existing bridge on King Ridge Road crossing Austin Creek @ latitude 38.56122 (38°33'40.392'N), and longitude -123.1022 (123°06'07.920" W), north/northwest of Cazadero CA.

The proposed project consists of replacing the existing single lane bridge with a new two-lane/two-shoulder bridge. The new bridge would be constructed upstream of the existing bridge. The existing bridge will remain in place during the new bridge construction to maintain traffic patterns and then demolished once the new bridge is completed. The new bridge alignment will be modified from the current alignment and require new road approaches, retainment walls, and guard rails.

See Item III, below of the Initial Study for additional details.

Environmental Finding: The Sonoma County Environmental Review Committee has determined, on the basis of the attached Initial Study, the project described above would

not have a substantial adverse impact on the environment, provided that the mitigation measures identified in the Initial Study are included in the project.

Initial Study: See attached. For more information, please contact David Walsh, Senior Environmental Specialist, at (707) 565-2526.

Mitigation Measures: Included in the attached Initial Study. The project applicant has agreed to implement all mitigation measures.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked "**Yes**" below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation" as indicated in the attached Initial Study and in the summary table below.

Table 1. Summary of Topic Areas.

Topic Area	Abbreviation*	**Yes**	**No**
Aesthetics	VIS	X	
Agriculture & Forestry Resources	AG		X
Air Quality	AIR	X	
Biological Resources	BIO	X	
Cultural Resources	CUL	X	
Energy	ENERGY		X
Geology and Soils	GEO	X	
Greenhouse Gas Emission	GHG		X
Hazards and Hazardous Materials	HAZ	X	
Hydrology and Water Quality	HYDRO	X	
Land Use and Planning	LU		X
Mineral Resources	MIN		X
Noise	NOISE		X
Population and Housing	POP		X
Public Services	PS		X
Recreation	REC		X
Transportation	TRANS	X	
Tribal Cultural Resources	TCR	X	
Utilities and Service Systems	UTL		X
Wildfire	FIRE	X	
Mandatory Findings of Significance	MFS	X	

RESPONSIBLE AND TRUSTEE AGENCIES

The following lists other public agencies whose approval is required for the project, or who have jurisdiction over resources potentially affected by the project.

Table 2. list the agencies and other permits that will be required to construct and/or operate the project.

Table 2. **Agency**	**Activity**	**Authorization**
U. S. Army Corps of Engineers	Work in navigable waters	Rivers and Harbors Act, Section 10, Federal Clean Water Act Section 404
Regional Water Quality Control Board (North Coast)	Discharge or potential discharge to waters of the state	California Clean Water Act (Porter Cologne) Section 401 -Waste Discharge requirements, general permit or waiver
State Water Resources Control Board	Generating stormwater (construction, industrial, or municipal)	National Pollutant Discharge Elimination System (NPDES) requires submittal of NOI
California Department of Fish and Wildlife	Lake or streambed alteration	Fish and Game Code, Section 1602
Sonoma County Permit and Resource Management Department (PRMD)	3836R Streambed Roiling Permit	Section VIII of Ordinance No. 3836R
NOAA Fisheries/ National Marine Fisheries Service (NMFS)	Incidental take permit for listed plant and animal species	Endangered Species Act
U.S. Fish and Wildlife Service (USFWS)	Incidental take permit for listed plant and animal species	Endangered Species Act
Native American Heritage Commission	Cultural Resources and Tribal Resources Records	
State Historic Preservation Office	Cultural Resources and Tribal Resources Records	

ENVIRONMENTAL FINDING:

Based on the evaluation in the attached Expanded Initial Study, I find that the project described above will not have a significant adverse impact on the environment, provided that the mitigation measures identified in the Initial Study are included as conditions of approval for the project and a Mitigated Negative Declaration is proposed. The applicant has agreed in writing to incorporate identified mitigation measure into the project plans.

Prepared by: David Walsh Date: October 30, 2025

Initial Study

Sonoma County Permit and Resource Management Department
2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 565-1900 FAX (707) 565-1103

I. INTRODUCTION:

Sonoma Public Infrastructure (SPI) proposes to replace the existing King Ridge Road Bridge crossing Austin Creek (Bridge number 20C-0433). A referral letter was sent to the appropriate local, state and federal agencies and interest groups who may wish to comment on the project.

This report is the Initial Study required by the California Environmental Quality Act (CEQA). The report was prepared by David Walsh, Senior Environmental Specialist, with the Sonoma County Permit and Resource Management Department, Natural Resources Division. Information was provided by SPI. Additional information was provided by County contracted consultants, as identified in this Initial Study. Technical studies referred to in this document are available for review at the Permit and Resource Management Department (Permit Sonoma).

Please contact David Walsh, Sr. Environmental Specialist, at (707) 565-2526, for more information.

II. EXISTING FACILITY

The existing bridge on King Ridge Road (Bridge Number 20C-0433) spans 120.5 feet and was built in 1965. The structure is a reinforced concrete (RC) deck on simple span rolled steel beams on RC pedestal seat abutments with RC wall piers single span bridge. The structure carries one lane of traffic for a total width of 16 feet between barriers. A vehicular guardrail with approach flares runs along each edge of the bridge deck. The rails exhibit no damage but are too low to provide adequate safety for pedestrians or bicyclists.

A Caltrans Bridge Inspection Report resulted in a low sufficiency rating and concluded the bridge to be structurally deficient. The Inspection Report also indicates that the substructure, channel, channel protection, scour conditions, and waterway adequacy are in poor condition.

Recent traffic counts indicate that the bridge carries a daily traffic volume of less than 400 average daily traffic (ADT). Traffic will remain the existing bridge during

construction of the new bridge.

III. PROJECT DESCRIPTION

The proposed project objective of replacing the structurally deficient existing bridge will meet all the current design standards including improvements to roadway approaches, drainage facilities, and appurtenant facilities. Installing the new free spanning bridge along with the removal of the existing bridge and its inchannel pier will improve hydraulic conditions through the reach of Austin Creek, lessening the channel constriction and improving fish passage conditions.

The project is located on King Ridge Road is a local rural road in Sonoma County located north of the City of Cazadero (Figure 1). The portion of King Ridge Road in the project area is rural and narrow, consisting of two travel lanes and minimal shoulders. The road traverses Austin Creek, a tributary to the Russian River. The project site is approximately 10 miles upstream of the Austin Creek confluence with the Russian River. It is the only route available to residents and facilities north of the bridge.

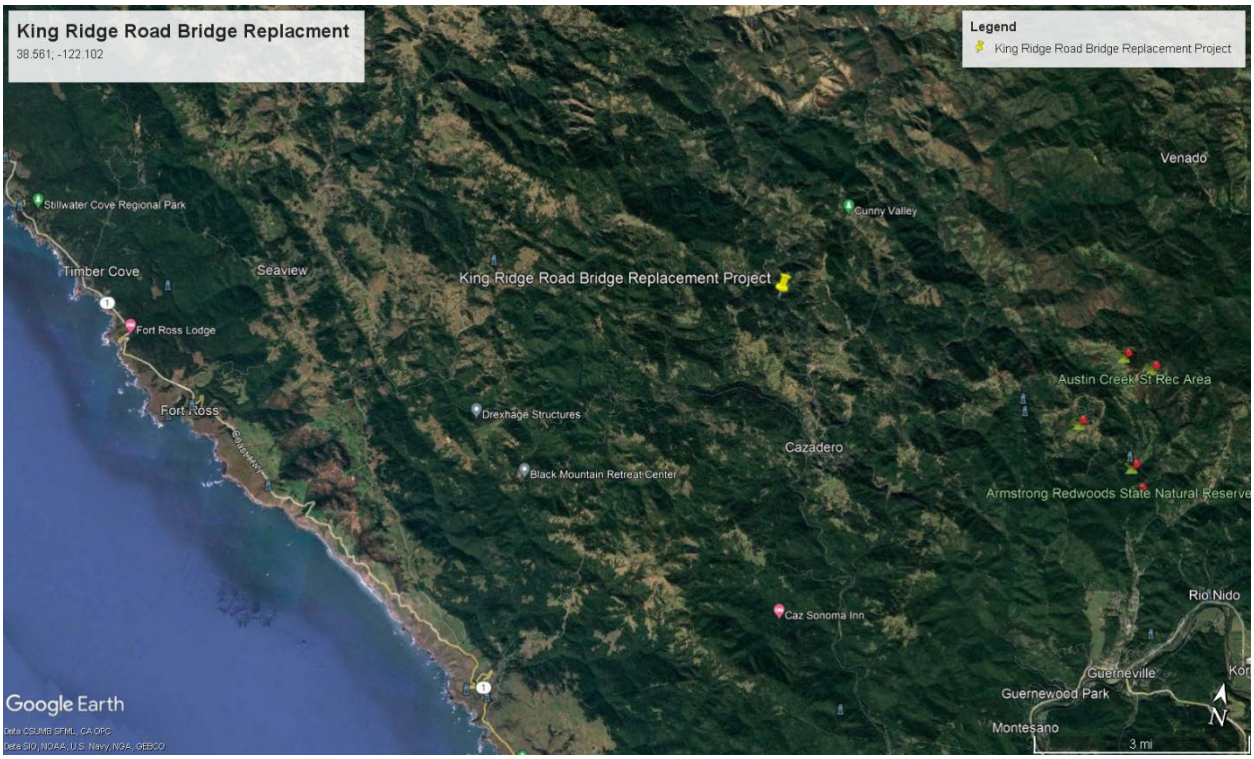


Figure 1. Project Location.

The replacement bridge will meet all the current design standards including improvements to roadway approaches, drainage facilities, and appurtenant facilities. The project will upgrade the bridge barriers to current standards and add shoulders to improve the operational characteristics for motorized and non-motorized vehicles. The bridge will meet Caltrans' requirement to pass the 100-year flood event with 4-ft of freeboard.

King Ridge Road will remain open to traffic throughout project duration. Three staging areas would be created for parking large equipment, construction employee parking, and for material storage. Both sides of the bridge will be accessible to the staging locations on parcels adjacent to the project. One staging area would be on the northwest end of the existing bridge and the and two on the southeast end of the bridge. Bridge work to drill abutment piles and secure the bridge deck will occur in the footprints of the new bridge road approaches.

The new bridge is free spanning, allowing most all major construction activities to be performed from top of bank. The removal of the existing bridge piers will still require access of the creek bed. The access point for a small excavator, would be on the on the right bank just downstream of the existing bridge. Minimal grading of the right bank will be required for moving the equipment into the creek bed but will be returned to grade and revegetated following the work.

The right of way (ROW) at the King Ridge Road is presumed to be 40 feet wide by prescriptive rights, although this will be confirmed during the ROW phase of the project. The new bridge will be to the east of the existing bridge and ROW acquisition is expected from two adjacent parcels (107-090-011 and 107-090-012). Temporary Construction Easements may be needed on both above parcels, the parcel to the northwest of the project site (107-090-010) and the parcel south of the project site (107-090-004) for staging. The remaining parcels (107-090-002, 107-090-006, 107-090-007) will be used but do not require a ROW.

The most likely sequencing and staging of equipment is described below during the various phases of construction. Work would occur within the identified areas, however, the order of activities, type of equipment, and materials could vary depending on the contractor selected to construct the project.

Site Preparation

All vegetation on the approaches will be removed to provide a clear travelled path. Minor shrubs can be removed with an excavator or backhoe while larger shrubs and trees may require tree removal equipment and a backhoe to remove stumps. The tree removal will occur at the staging areas to clear space for equipment and material storage.

New Bridge Construction

To construct the new bridge abutments, equipment will be staged on top of bank, so that heavy equipment such as drill rigs and cranes do not need to access the channel and any major impacts resulting from large scale temporary road construction to the creek can be avoided.

Overall construction will be two work seasons: construction of the new bridge and road approaches in season 2026 and removal of the existing bridge in season 2027. Removal of the existing bridge from the creek bed will occur in season 2027 between

June 15 and October 15. Site preparation activities outside of the creek may occur outside of/prior to the periods specified above. Some vegetation removal will be required, and this could occur during the fall (below top-of-bank) or winter season (above top-of-bank) prior to construction in order to avoid the bird nesting season of February 15 to September 1. Demolition of the existing bridge will occur during the summer after the replacement bridge is constructed.

The new bridge is a steel girder design that will free span the channel with no center supports and seat abutments on each bank. Const/ruction of abutments will be near the creek channel top of bank, above the ordinary high water (OHW) level of the creek. The abutments will be anchored into the banks supported by 48-inch (4-foot) diameter Cast-in-Drilled-Hole (CIDH) piles. Three CIDH piles are required per abutment for a total of six CIDH piles needed for constructing the new bridge. No pile driving is required. Likely CIDH pile excavation depth is estimated at 30-40 feet per pile and drilling will be above the summer water level, and it is unlikely to encounter ground water.

After the pile work is completed, workers will set the abutment forms and pour concrete from the top of the bank. After the abutments are constructed the steel truss bridge segments will be assembled onsite and lifted into place onto the abutments.

Workpad Fabrication

A small gravel workpad would be needed in the creek bed to support an excavator for access and removal the existing bridge piers. Prior to the work pad construction, the surface water would need to be diverted around the construction area. The water diversion can be accomplished by two methods depending on the creek conditions. Surface flow could be diverted under the work pad or moving the surface flow around the work pad along a bank, or a combination of both. First the creek reach running under the bridge would be blocked off using seine nets placed both upstream and downstream. The upstream end will be placed first so aquatic species can move downstream and out of the work area. Next, a diversion dam would be constructed upstream to divert flow to one side of the creek. If needed, culverts would be lowered in the creek below the diversion dam to covey water through the work area and discharge downstream. Once the water is diversion is completed, the gravel will be brought in from the left bank access and spread out over the culverts to form the work pad using the excavator.

Existing Bridge Removal

After one-lane traffic is switched onto the new bridge, the existing north and south approaches will be used as staging areas for removal of the existing bridge. Cranes would be used to remove the existing span and remove the existing piers and abutments. The existing abutment walls would be removed to the top of the bearing seat or to a depth five feet below grade, whichever is less. The existing reinforced concrete column pier and timbers would be removed. Following removal of the existing bridge, asphalt paving at the existing approach roadways will be removed and the area will be planted with a mix of native trees, shrubs, and seeded grasses to mimic the plant community of the surrounding reference area.

Removal of the existing bridge downstream will include some excavation in the creek bed to remove the support footings and to regrade the banks, where the abutments were located, to a stable slope. This will result in a slightly larger channel opening downstream of the new bridge, but it is expected to have negligible effects on channel velocity. RSP will be placed underneath the new bridge at each bank to protect the abutments from scour and could extend approximately 50 feet upstream and downstream of the bridge. Excavation to place the RSP will extend 10-to-12 feet below the channel bottom.

IV. SETTING

Regional Setting

The King Ridge Road Bridge crosses over Austin Creek at approximately nine miles north from the confluence of Austin Creek and the Russian River. Austin Creek is a perennial, fourth order, stream and is approximately 16 miles long. Austin Creek and its tributaries drain a basin of approximately 68 square miles. Redwood and Douglas fir forest dominate the watershed with oak woodlands and grasslands as a sub-dominant community type especially on ridge tops and south facing exposures. The dense tree canopies in the area create shady conditions over Austin Creek.

The watershed is 90 percent owned by private landowners with about 10 percent held by public entities and non-government agencies (Sonoma RCD 2022). Major land uses include timber harvest, quarrying, gravel mining, recreation, grazing, and rural residential (Sonoma RCD 2022).

Physical Site Conditions

Elevations, in northwest Sonoma County range from sea level to 2320 feet on Mohrhardt Ranch, which is the divide between Bearpen Creek, and the Austin Creek mainstem. King Ridge Road Bridge is around 250-260 feet above sea level. Surrounding land uses in the vicinity of the bridge are primarily open space with limited rural residential in the vicinity.

The topography at the action area consists of the generally north-south meandering river valley and the steep slopes on either side of the channel. In the watershed, the Upper Austin Creek and Bearpen Creek have confined higher slope channels that transport sediment to the downstream areas where it deposits in lower slope areas. Above the channel, where the bridge, road and local rural residences are located, is lower to mid-slope geology.

The geology is mapped by the United States Geological Survey (USGS) as Graywacke and mélange (Cretaceous and Jurassic). The geology has a low susceptibility to liquification.

V. ISSUES RAISED BY THE PUBLIC OR AGENCIES

A referral packet was drafted and circulated to inform and solicit comments from selected relevant local, state and federal agencies; and to special interest groups that were anticipated to take interest in the project.

The project was presented to the Sonoma County Landmarks Commission on June 3, 2025.

No issues have been raised.

VI. OTHER RELATED PROJECTS

There are multiple bridge replacement projects in Sonoma County where construction has either started or is ready to start. However, these projects are in different creeks and too distant from the project to have any associated impacts. Other than the King Ridge Road Bridge replacement project in Austin Creek in the summers of 2026 and 2027, there are no other state, federal, or local projects occurring in the area that could have cumulative impacts with the project.

VII. EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts of this project based on the criteria set forth in the State CEQA Guidelines and the County's implementing ordinances and guidelines. For each item, one of four responses is given:

> **No Impact: The project would not have the impact described.** The project may have a beneficial effect, but there is no potential for the project to create or add increment to the impact described.
>
> **Less Than Significant Impact**: The project would have the impact described, but the impact would not be significant. Mitigation is not required, although the project applicant may choose to modify the project to avoid the impacts.
>
> **Potentially Significant Unless Mitigated:** The project would have the impact described, and the impact could be significant. One or more mitigation measures have been identified that will reduce the impact to a less than significant level.
>
> **Potentially Significant Impact:** The project would have the impact described, and the impact could be significant. The impact cannot be reduced to less than significant by incorporating mitigation measures. An environmental impact report must be prepared for this project.

Each question was answered by evaluating the project as proposed, that is, without considering the effect of any added mitigation measures. The Initial Study includes a discussion of the potential impacts and identifies mitigation measures to substantially reduce those impacts to a level of insignificance where feasible. All references and

sources used in this Initial Study are listed in the Reference section at the end of this report and are incorporated herein by reference.

SPI has agreed to accept all mitigation measures listed in this Initial Study as conditions of approval for the proposed project, and to obtain all necessary permits, notify all contractors, agents and employees involved in project implementation and any new owners should the property be transferred to ensure compliance with the mitigation measures.

1. AESTHETICS:

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

a) Have a substantial adverse effect on a scenic vista?

Comment:

The PRMD Visual Assessment (VA) Guidelines have been applied to the visual characteristics of the proposed bridge replacement project. While the analysis of visual impacts involves qualitative judgments, this procedure is intended to define a methodology that uses, to the extent practicable, objective standards that can be described and used in a consistent manner. Project impacts have been analyzed by considering public viewing points. Public viewing points include public roads, public trails, and public parks. Viewing points from private properties are not used when applying the VA Guidelines.

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Even when the existing appearance of a project site is uninspiring, a community may still object to projects that fall short of its visual goals.

The project is not likely to be controversial with the community as a whole. The project is in a remote part of the County that is rural in nature, as there are very few residents in the area, and the roadway has low traffic volumes (less than 400 vehicles per day) resulting in relatively few viewers. This vicinity of King Ridge Road is primarily used by private landowners and agricultural operations.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project.

There are no parks or trails from which the bridge can be viewed, based on a site survey as well as review of topography and aerials. The bridge may be seen from few

residences, with the closest residences within several hundred feet to the south of the bridge, although there are intervening trees obstructing views of the bridge from the residence. Most viewers of the bridge would be by commuters in vehicles or biking.

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. As described in the above sections, changes to the existing project corridor will be minimized to the extent possible. The combination of a limited viewshed, a design that is compatible with the existing visual character, and only temporary impacts to visual quality results in the visual impacts determined to be moderately low. These impacts include the new structure, new asphalt at the approaches, and bank stabilization to protect the new structure. Over time these new elements will blend in with the existing roadway.

Permanent Impacts

The new bridge will be upstream of the existing bridge and in a new alignment, and the structure will be slightly wider than the existing bridge. Exposure is low as daily use of King Ridge Road is low. Viewers familiar with the roadway as it is now would likely have a low sensitivity to changes resulting from any modifications to its setting and the visual dominance value would be Inevident.

Temporary Impacts

Temporary visual impacts will be high during the construction due to the presence of large equipment and removal of vegetation. The equipment staging will occur at the project site in two existing turn outs and a wide spot along the road shoulder. Construction signage will notify travels of the roadwork. Disturbed areas will be regraded to meet pre-project grades at the end of construction. Since these impacts are temporary and will be returned to pre-construction, the sensitivity to changes would be low from modifications to setting. The visual dominance value would be Inevident. These areas will be revegetated and monitored to ensure the success of the replacement plantings. (1, 29)

<u>Significance Level:</u>

The thresholds of significance for visual impact analysis would be Less than Significant with Mitigation Incorporated

The County will or has incorporated the following measures to avoid or minimize visual impacts:

- Minimize vegetation removal to the extent possible, and trim trees rather than remove where possible.
- Protect existing vegetation to remain (outside of clearing and grubbing limits) from the contractor operations, equipment, and materials storage. Environmentally Sensitive Areas (ESA) are identified on the project plans to limit contractor action areas and will be fenced off.

- Screen Construction staging and storage areas where feasible. Place unsightly material, equipment storage and staging so that they are not visible to the maximum extent possible.

b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

Comment:
King Ridge Road is not a designated state scenic highway. The existing bridge is not a Sonoma County Historic Landmark. The project will not affect heritage trees, unique geological features or any other historic buildings within a state scenic highway. (1, 30)

Significance Level:

Less than Significant Impact

c) In non-urbanized areas, will the project 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?

Comment:
The project is in an isolated part of northern Sonoma County with little development and densely wooded surroundings and, except for three small residences on the south side of the bridge, is within a non-urbanized area. The parcels immediately adjacent to the bridge are privately owned and other surrounding land use is agriculture. Existing views of the bridge occur from King Ridge Road and are primarily of the bridge deck. The approach roadway provides the viewer with minimal visual change between the existing and new bridge, as the new bridge is of similar design only with a more open appearance. Construction of the proposed project would not substantially change the viewshed or the visual character or quality of public views of the site and its surrounds within the corridor. (1, 30)

Significance Level:

Less than Significant Impact

d) Create a new source of substantial light or glare which would adversely affect day or nighttime view in the area?

Comment:
No new structures will introduce new sources of light and glare. King Ridge Road and the immediate vicinity of the project site do not contain any street lighting or residential lighting. The only exiting source of nighttime lighting in the immediate vicinity of the project site is from motor vehicle headlights. Guardrail reflectors are

provided at each approach of the existing bridge. Except for sun reflection off motor vehicle windshields and to a lesser extent seasonal water in Austin Creek, there are no exiting sources of glare in the project area.

No new lighting is proposed for the replacement bridge or King Ridge Road as a part of the project. The new bridge would include new guardrail reflectors at each approach, but it would not increase the motor vehicle carrying capacity compared to the existing bridge. The replacement bridge would not include new sources of substantial glare. (1)

Significance Level:

No Impact

2. AGRICULTURE AND FOREST RESOURCES:

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. 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?

Comment:
None of the parcels making up the project area are categorized as Prime and Unique Farmland. This determination was made using the Farmland Mapping and Monitoring Program data from the California Department of Conservation (CDC) (https://maps.conservation.ca.gov/DLRP/CIFF/). The CDC uses USDA Natural Resources Conservation Service (NRCS) soil surveys to classify land based on factors like soil quality, growing season, moisture supply, and the ability to sustain long-term agricultural production.

The lower southeast parcel in the project area was an apple orchard but is not in production and no ground will be disturbed. The state conservation designates the surrounding parcels as Grazing Land. This is determined by the vegetation

composite that is suited for grazing livestock.

Property acquisition for the project will be done in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended in 1987, and with requirements of Title VI of the 1964 Civil Rights Act, as required per the Local Assistance Procedures Manual, Chapter 13. (1, 2)

Significance Level:

No Impact

b) Conflict with existing zoning for agricultural use, or Williamson Act Contract?

Comment:
The project will not conflict with existing zoning for agricultural use. Public projects are exempt from zoning requirements per Sonoma County Code 26-02-070. (1, 2, 45)

Significance Level:

No Impact

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 4526) or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)?

Comment:
Zoning at the project site is “Rural Residential”, “Land Intensive Agriculture”, “Resources and Rural Development”, and “Planned Community.” The project would not conflict with the existing zoning of the site or necessitate rezoning of the site. Therefore, no impact would occur with implementation of the project. (1, 12) RRD B6 160, RC50/50

Significance Level:

No Impact

d) Result in the loss of forest land or conversion of forest land to non-forest use?

Comment:
Approximately 47 individual trees and stumps will be removed. These trees will be replanted to ensure that the impact is temporary. The proposed project will not result in the loss of forest land, nor will it convert forest land to non-forest use. Individual trees removed would be replaced via mitigation plantings. (1)

Significance Level:

Less than Significant with Mitigation Incorporated

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?

Comment:
The project does not involve other changes in the environment that could result in conversion of farmland to non-agricultural use or forest land to non-forest use. (1,2)

Significance Level:

No Impact

3. AIR QUALITY:

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

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Comment:
The project is within the jurisdiction of the Northern Sonoma County Air Pollution Control District (NSCAPCD). The NSCAPCD does not have an adopted air quality plan because it is in attainment for all federal and state criteria pollutants. (1, 5)

Significance Level:

No Impact

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?

Comment:
While the project is in the NSCAPCD jurisdiction and in attainment for criteria pollutants, PM_{10} is a criteria pollutant that is still closely monitored in the NSCAPCD. Readings in the district have exceeded state standards on several occasions in the last few years. The high PM_{10} readings occurred in the winter and are attributed to the seasonal use of wood burning stoves. The project will have no long-term effect on PM_{10}, because all surfaces will be paved, gravel, landscaped or otherwise treated to stabilize bare soils, and operational dust generation will be insignificant. There could be a significant short-term emission of dust (which would include $PM_{2.5}$ and

PM_{10}) during construction. While these emissions could be significant at the project level, site BMPs and mitigation measures for controlling dust will lower construction related airborne particulates to a less than significant amount. (1, 5)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

This potentially significant impact can be reduced to a less-than-significant level by implementing the following mitigation measure during construction:

Mitigation Measure AIR-1 Air Quality/ Fugitive Dust Control.

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.
- Pursuant to the California Vehicle Code (State of California 2009), all trucks hauling soil and other loose material to and from the construction site shall be covered or shall maintain at least 6 in. of freeboard (i.e., minimum vertical distance between top of load and the trailer).
- Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 ft. in height to allow development of microorganisms prior to resoiling of the construction area. These topsoil piles shall be clearly marked and flagged; Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture.
- 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.

c) Expose sensitive receptors to substantial pollutant concentrations?

Comment:
Sensitive receptors include hospitals, schools, convalescent facilities, and residential areas. Implementation of Mitigation Measure AIR-1 would reduce these impacts to less than significant. (1)

Significance Level:

Less than Significant with Mitigation Incorporated

d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Comment:
Construction equipment may generate odors during project construction. The impact would be less than significant as it would affect a very low number of people due to the rural setting and would be a short-term impact that ceases upon completion of the project. (1)

Significance Level:

Less than Significant Impact

4. BIOLOGICAL RESOURCES:

General site biotic and ecological surveys of the King Ridge Road Bridge area were conducted by Senior Environmental Specialists with the Sonoma County Permit and Resource Management Department (PRMD) Natural Resources Division. These observations along with desktop research were utilized to prepare a project level Natural Environment Study (NES) to satisfy requirements of the National Environmental Policy Act (NEPA). The report was submitted to Caltrans Local Assistance who represents the Federal Highway Administration (FHWA), the NEPA lead agency for the project. The NES was approved January 2023.

A project level Biological Assessment was written, and Caltrans staff submitted to The National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) to initiate Section 7 consultation of the Federal Endangered Species Act consultation. NMFS issued a letter of concurrence on January 31, 2025, that the project was not likely to adversely affect listed salmonids or their designated critical habitat. A Biological Assessment was also submitted by Caltrans to the USFWS for Northern Spotted Owl (NSO). The USFW issued a letter of concurrence on December 9, 2024, that the project would not likely adversely affect NSO with surveys for NSO and appropriate buffering measures, if needed, to mitigate project related impacts.

The following analysis has been summarized from the project's NES and BA/BO documentation.

Regulatory Framework

The following discussion identifies federal, state, and local environmental regulations that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

Federal

Federal Endangered Species Act (ESA)

The ESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of Interior and the Secretary of Commerce are designated in ESA as responsible for identifying endangered and threatened species and their designated critical habitat, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on listed species. The USFWS and NMFS are charged with implementing and enforcing the ESA. USFWS has authority over terrestrial and continental aquatic species, and NMFS has authority over species that spend all or part of their life cycle at sea, such as salmonids.

Section 9 of ESA prohibits the unlawful "take" of any listed fish or wildlife species. Take, as defined by ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such action." USFWS's regulations define harm to mean "an act which actually kills or injures wildlife." Such an act "may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3). Take can be permitted under ESA pursuant to sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. ESA does not extend the take prohibition to federally listed plants on private land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

The Migratory Bird Treaty Act of 1918 (MBTA)

The U.S. MBTA (16 USC §§ 703 et seq., Title 50 Code of Federal Regulations [CFR] Part 10) states it is "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill; attempt to take, capture or kill; possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or in part, of any such bird or any part, nest or egg thereof…" In short, under MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird, destroying a nest, or destroying an egg. The USFWS enforces MBTA. The MBTA does not protect some birds that are non-native or human-introduced or that belong to families that are not covered by any of the conventions implemented by MBTA. In 2017, the USFWS issued a memorandum stating that the MBTA does not prohibit incidental take; therefore, the MBTA is currently limited to purposeful actions, such as directly and knowingly removing a nest to construct a project, hunting, and poaching.

The Clean Water Act (CWA)

The CWA is the primary federal law regulating water quality. The implementation of the CWA is the responsibility of the U.S. Environmental Protection Agency (EPA). However,

the EPA depends on other agencies, such as the individual states and the U.S. Army Corps of Engineers (USACE), to assist in implementing the CWA. The objective of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 and 401 of the CWA apply to activities that would impact waters of the U.S. The USACE enforces Section 404 of the CWA, and the California State Water Resources Control Board enforces Section 401.

Section 404

As part of its mandate under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into "waters of the U.S." "Waters of the U.S. include territorial seas, tidal waters, and non-tidal waters in addition to wetlands and drainages that support wetland vegetation, exhibit ponding or scouring, show obvious signs of channeling, or have discernible banks and high-water marks." Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3(b)). The discharge of dredged or fill material into waters of the U.S. is prohibited under the CWA except when it is in compliance with Section 404 of the CWA.

Enforcement authority for Section 404 was given to the USACE, which it accomplishes under its regulatory branch. The EPA has veto authority over the USACE's administration of the Section 404 program and may override a USACE decision with respect to permitting. Substantial impacts to waters of the U.S. may require an Individual Permit's Projects that only minimally affect waters of the U.S. may meet the conditions of one of the existing Nationwide Permits, provided that such permit's other respective conditions are satisfied. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions (see below).

Section 401

Any applicant for a federal permit to impact waters of the U.S. under Section 404 of the CWA, including Nationwide Permits where pre-construction notification is required, must also provide to the USACE a certification or waiver from the State of California. The "401 Certification" is provided by the State Water Resources Control Board through the local Regional Water Quality Control Board (RWQCB). The RWQCB issues and enforces permits for discharge of treated water, landfills, storm-water runoff, filling of any surface waters or wetlands, dredging, agricultural activities and wastewater recycling. The RWQCB recommends the "401 Certification" application be made at the same time that any applications are provided to other agencies, such as the USACE, USFWS, or NMFS. The application is not final until completion of environmental review under the CEQA. The application to the RWQCB is like the pre-construction notification that is required by the USACE. It must include a description of the habitat that is being impacted, a description of how the impact is proposed to be minimized and proposed mitigation measures with goals, schedules, and performance standards. Mitigation must include a replacement of functions and values, and replacement of wetland at a minimum ratio of 2:1, or twice as many acres of wetlands provided as are removed. The RWQCB looks for mitigation that is on site and in-kind, with functions and values as

good as or better than the water-based habitat that is being removed.

State

California Endangered Species Act (CESA)

Provisions of CESA protect state-listed threatened and endangered species. The CDFW is charged with establishing a list of endangered and threatened species. CDFW regulates activities that may result in "take" of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of "take" under the California Fish and Game Code (CFGC), but CDFW has interpreted "take" to include the killing of a member of a species which is the proximate result of habitat modification.

Fish and Game Code 1600-1602

Sections 1600-1607 of the CFGC require that a Notification of Lake or Streambed Alteration Agreement (LSAA) application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions in the application and, if necessary, prepares a LSAA that includes measures to protect affected fish and wildlife resources, including mitigation for impacts to bats and bat habitat.

Nesting Birds

Nesting birds, including raptors, are protected under CFGC Section 3503, which reads, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." In addition, under CFGC Section 3503.5, "it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto". Passerines and non-passerine land birds are further protected under CFGC 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFW.

Non-Game Mammals

Sections 4150-4155 of the CFGC protects non-game mammals, including bats. Section 4150 states "A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A non-game mammal may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission." The non-game mammals that

may be taken or possessed are primarily those that cause crop or property damage. Bats are classified as a non-game mammal and are protected under the CFGC.

California Fully Protected Species and Species of Special Concern

The classification of “fully protected” was the CDFW’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or ESA. The Fish and Game Code sections (fish at §5515, amphibians and reptiles at §5050, birds at §3503 and §3511, and mammals at §4150 and §4700) dealing with “fully protected” species state that these species “…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species,” although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species. In 2003, the code sections dealing with “fully protected” species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

California Species of Special Concern (CSC) are broadly defined as animals not listed under the ESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or because they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under ESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under the CEQA during project review.

Porter-Cologne Water Quality Control Act

The intent of the Porter-Cologne Water Quality Control Act (Porter-Cologne) is to protect water quality and the beneficial uses of water, and it applies to both surface and ground water. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the RWQCBs develop basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of both statewide and basin plans. Waters regulated under Porter-Cologne, referred to as “waters of the State,” include isolated waters that are not regulated by the USACE. Projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, any person discharging, or proposing to discharge, waste (e.g., dirt) to waters of the State must file a Report of Waste Discharge and receive either waste discharge requirements (WDRs) or a waiver to WDRs before beginning the discharge.

Local

Sonoma County General Plan

The Sonoma County General Plan 2020 Land Use Element and Open Space & Resource Conservation Element both contain policies to protect natural resource lands including, but not limited to, watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors.

Riparian Corridor Ordinance

The riparian corridor combining zone is established to protect biotic resource communities, including critical habitat areas within and along riparian corridors, for their habitat and environmental value, and to implement the provisions of the *General Plan Open Space and Resource Conservation and Water Resources Elements*. These provisions are intended to protect and enhance riparian corridors and functions along designated streams, balancing the need for agricultural production, urban development, timber and mining operations and other land uses with the preservation of riparian vegetation, protection of water resources, floodplain management, wildlife habitat and movement, stream shade, fisheries, water quality, channel stability, groundwater recharge, opportunities for recreation, education and aesthetic appreciation and other riparian functions and values.

Environmental Setting

The elevation is approximately 250 – 260 feet above sea level at the King Ridge Road crossing over Austin Creek. Major land uses include timber harvest, quarrying, gravel mining, recreation, grazing, open space, and rural residential (Sonoma RCD 2022).

The bridge and the encompassing project area are located on the Cazadero USGS (1977) 7.5-minute quadrangle map in Section 5.5, Township 8 North, and Range 11 West and is in unincorporated Sonoma County at latitude 38.562 (38°33’40.4’N), and longitude -123.101 (123°06’07.8” W).

The Biological Study Area (BSA) was defined to include the project footprint, including the existing right-of-way, proposed right of-way, temporary construction easements, and temporary staging areas (Figure 3). In addition, the BSA includes the riparian corridor and stream channel 100 feet upstream and downstream of the project limits, to consider indirect impacts and adjacent habitat from which species might migrate into the project site. In total the BSA encompasses approximately two acres, including the staging areas. The disturbed area within the BSA would be much less. Potential impacts to salmonids were evaluated on a watershed basis rather than within a discrete BSA.

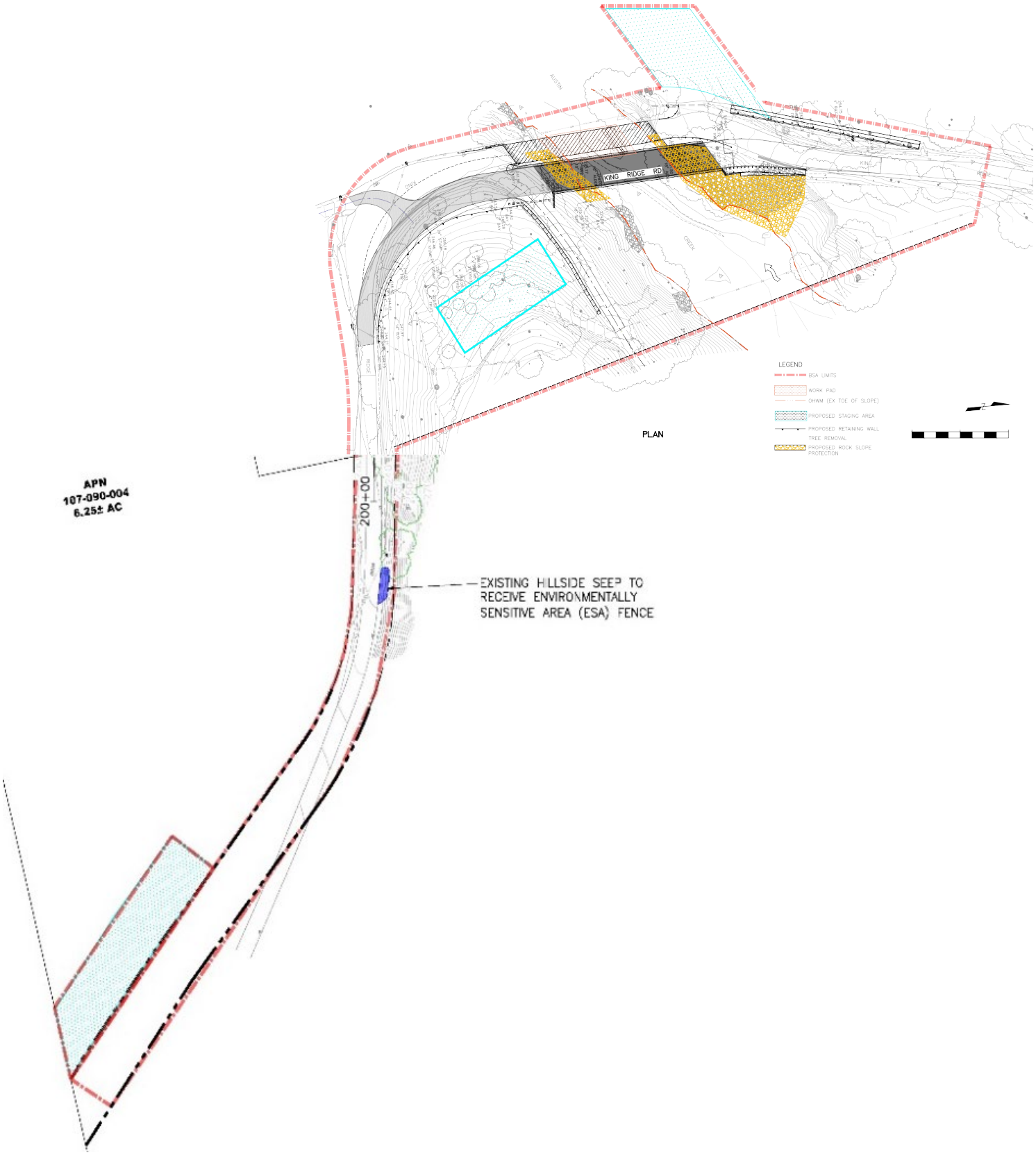


Figure 2. Biological Study Area and Project Impact Area.

Plant Communities and Habitat Types in the BSA

The following natural communities are found at and surrounding the site:

Riparian habitat

Riparian habitat is present in a linear corridor along the banks of Austin Creek within the project area. In general, riparian habitat provides food, water, breeding sites, egg deposition locations, and nesting areas for a wide variety of wildlife. Riparian vegetation provides protective cover and shade and contributes woody debris to stream channels, creating important habitat for aquatic species. Vegetation filters sediment and pollutants in storm water runoff, slows flood flows, provides erosion protection for stream banks, and facilitates groundwater recharge.

The riparian habitat is dominated by Big Leaf Maple (*Acer macrophyllum*), Pacific Dogwood (*Cornus nuttallii*), and Red Alder (*Alnus rubra*) to about 25 feet wide on each bank in the project limits. As a vegetation alliance, the Riparian Forest within the project area is also a CDFW sensitive natural plant community.

The riparian woodland corridor runs through a redwood forest biotic zone. The redwood forest zone includes patches of redwood (*Sequoia sempervirens*), within a mixed forest of Douglas Fir (*Pseudotsuga menziesii*), Tanoak (*Lithocarpus densiflorus*), Pacific Madrone (*Arbotus menziesii*), Western Hemlock (*Tsuga* heterophylla), and California Laurel (*Umbellularia californica*).

The CDFG Stream Inventory Report (2006) for Austin Creek reported a mean percent canopy density of 51 percent. The mean percentages of deciduous and evergreen trees were 24 percent and 37 percent, respectively, with an open area of 39 percent for the reach including the project area. Although the canopy density for the reach containing the project area fared better when compared to the surrounding reaches, CDFG determined the watershed had a generally low percentage of riparian canopy (especially in the lower stream reaches) and identified opportunities for enhancing (fisheries) habitat by increasing riparian cover throughout the watershed (CDFG 2006).

Austin Creek Channel

The Austin Creek channel allows for northeasterly and southwesterly movement through riparian habitat. During the wet season, this corridor provides migration and rearing habitat for coho salmon and steelhead. Austin Creek within the project area is primarily composed of a riffle section of cobble and bedrock substrate. At the bridge site the channel bottom substrate is sand, and pebble interspersed with cobble and transitions into a glide that becomes riffle habitat again just downstream of the bridge. There is a small pool area upstream of the bridge. At the bridge, the creek is constricted by the abutments and down cutting has occurred due to excessive scour and a good deal of the channel bottom is exposed bedrock. Flow is perennial in the project area and much of Austin Creek and has perennial flow as well.

Within the project area, the channel types are considered moderately entrenched, with a moderate gradient (2-to-4 percent). The reach is riffle dominate with stable plan and profile, relatively stable banks and predominantly bedrock and cobble substrate (CDFG 2006). Aquatic vegetation consists of mostly California blackberry (*Rubus ursinus*), horsetail (*Equisetum arvense*), and some torrent sedge (*Carex nudata*) growing along the channel edges. In the summer, when flow is lower and water temperatures increase, the channel edges may become covered with algae and flow may become subsurface.

Physical Conditions

The topography at the site consists of the generally north-south meandering river valley and the steep slopes on either side of the channel. In the watershed, the Upper Austin Creek and Bearpen Creek have confined higher slope channels that transport sediment to the downstream areas where it deposits in lower slope areas. Above the channel, where the bridge, road and local rural residences are located, is lower to mid- slope geology.

The geology within the project area is mapped by the United States Geological Survey (USGS) as Graywacke and mélange (Cretaceous and Jurassic). The geology has a low susceptibility to liquification. (1,31)

Would the project:

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

Comment:

Regulatory Framework

The following discussion identifies federal, state, and local environmental regulations that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

Special-Status Species

Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal ESA or CESA. These acts afford protection to both listed and proposed species. In addition, California Department of Fish and Wildlife CDFW Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, USFWS Birds of Conservation Concern, and CDFW special-status invertebrates, are all considered special-status species. Although CDFW Species of Special Concern generally have

no special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Plant species on California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants with California Rare Plant Ranks (Rank) of 1, 2 and 3 are also considered special-status plant species and must be considered under CEQA. Bat species designated as "High Priority" by the Western Bat Working Group (WBWG) qualify for legal protection under Section 15380(d) of the CEQA Guidelines. Species designated High Priority" are defined as "imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.

Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended (16 USC 1531 *et seq*.) was enacted to provide a means to identify and protect endangered and threatened species. Under the Section 9 of the ESA, it is unlawful to take any listed species. "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a listed species. "Harass" is defined as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. "Harm" is defined as an act which kills or injures fish or wildlife and may include significant habitat modification or degradation which kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering. Actions that may result in "take" of a federal-listed species are subject to The USFWS or NMFS permit issuance and monitoring. Section 7 of ESA requires federal agencies to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat for such species. Any action authorized, funded, or carried out by a federal agency or designated proxy (i.e., USACE) which has potential to affect listed species requires consultation with The USFWS or NMFS under Section 7 of the ESA.

Critical Habitat

Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The ESA requires federal agencies to consult with the USFWS and/or NMFS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species' recovery. In many cases, this level of protection is like that already provided to species by the ESA jeopardy standard. However, areas that are currently unoccupied by the species, but which are needed for the species' recovery are protected by the prohibition against adverse modification of critical

habitat.

Essential Fish Habitat

Essential Fish Habitat (EFH) is regulated through the NMFS. Protection of Essential Fish Habitat is mandated through changes implemented in 1996 to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to protect the loss of habitat necessary to maintain sustainable fisheries in the United States. The Magnuson-Stevens Act defines Essential Fish Habitat as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" [16 USC 1802(10)]. NMFS further defines EFH as areas that "contain habitat essential to the long-term survival and health of our nation's fisheries." EFH can include the water column, certain bottom types such as sandy or rocky bottoms, vegetation such as eelgrass or kelp, or structurally complex coral or oyster reefs. Under regulatory guidelines issued by NMFS, any federal agency that authorizes, funds, or undertakes action that may affect EFH is required to consult with NMFS (50 CFR 600.920).

Discussion of Special Status Plants

A list of regionally occurring special-status plant species was compiled based on a review of pertinent literature, the results of the field surveys, and the review of the USFWS species list, and California Native Diversity Database (CNDDB) and California Native Plant Society (CNPS) database records. For each species, habitat requirements were assessed and compared to the habitats within the BSA and immediate vicinity to determine their potential to be affected by the proposed project. Based on this review of habitat requirements and the results of the field assessment, no special species plants were determined to have the potential to occur within the BSA.

Surveys will occur during the appropriate survey season prior to project activities occurring. If individuals are found, mitigation measure BIO-10 will reduce impacts to a less than significant level.

Discussions of Special Status Animals

A list of regionally occurring special-status animal species was compiled based on a review of pertinent literature, the results of the field surveys, and the review of the USFWS species list via their Information for Planning and Consultation (IPAC) site, CNDDB database records, and a query of the California Wildlife Habitat Relationships (CWHR) system (California Department of Fish and Game 2008). The CWHR system was used to help determine wildlife species that potentially occur in the vegetation habitats within the BSA. The CWHR is a predictive database system based on scientific information concerning wildlife species and their habitat relationships. Fish and invertebrates are not included in the CWHR system.

For each species, general habitat requirements were assessed and compared to the habitats within the BSA and immediate vicinity to determine their potential to be

affected by the proposed project. Based on this review of general habitat requirements and the results of the field assessment, there are ten special--status animal species potentially affected by the project.

These special-status animal species include the following: northern spotted owl (*Stix occidentalis caurina*), foothill-yellow legged frog (*Rana boylii*), California red-legged frog (*Rana draytonii*), red-bellied newt (*Taricha rivularis*), California giant salamander (*Dicamptodon ensatus*), western pond turtle (*Emys marmorata*),Central California Coast (CCC) Coho salmon *(Oncorhynchus kisutch*) Evolutionary Significant Unit (ESU), CCC steelhead (*O. mykiss irideus*) District Population Segment (DPS), and the California Coastal (CC) Chinook salmon (*O. tshawytscha)* ESU. Potential impacts and recommended mitigation measures for the species listed above are addressed in this document.

Northern Spotted Owl

The Northern Spotted Owl is state and federally listed as threatened. The northern spotted owl is the resident spotted owl subspecies found within cool temperate forests of coastal western North America, from Marin County (California) northward. It is a medium-sized (16-19 inches; 41-48 centimeters) dark brown owl with a wingspan of approximately 40 inches (102 centimeters); females are larger than males. Spotted owls are primarily nocturnal but will opportunistically forage during the day. The diet consists mainly of woodrats (*Neotoma* spp.) and squirrels, as well as other small mammals, reptiles, birds and insects.

Northern spotted owls nest in cavities or on platforms in large trees, preferentially inhabiting old growth forests, though it can be found in mixed primary- and secondary-growth forests in the southern part of its range (southern Oregon and California). The USFWS has found that structure rather than age is more important in defining habitat characteristics that are important to owls. Suitable habitat will have a moderate to high canopy closure, large trees with various deformities, numerous large snags, large accumulations of fallen trees and woody debris, and an open understory for owls to fly (USFWS 1990). The home range of individual northern spotted owls is variable in size, ranging from a handful to several thousand acres. Home range size also varies seasonally, generally being smallest in the spring and summer, and largest in the fall and winter (USFWS 1990). Foraging and roosting activities during the entire year are concentrated in old growth or mixed-aged stands of mature and old-growth trees (USFWS 1990).

Northern spotted owls mate for life and typically do not migrate. Spotted owl pairs usually do not nest every year nor are nesting pairs successful every year (USFWS 1990). Nesting behavior begins in February to March and nesting occurring March to June, depending on latitude and elevation (USFWS 1990). Fledging occurs from mid-May to late June, and parental care continues into September (USFWS 1990). This subspecies is intolerant of habitat disturbance and highly territorial.

Coniferous forest within the project site consists entirely of second- and third-growth trees, and lacks the structural characteristics preferred by the northern spotted owl.

However, there are several documented northern spotted owl territories within five miles of the project area, including one located approximately 1 mile from the northern side of the project area. Thus, coniferous forest within the project area and surrounding areas is not ideal for this species, but it may nonetheless support foraging and possibly breeding.

An ESA section 7 consultation was conducted between Caltrans and USFW with a biological opinion for NSO issued on December 9, 2024. In a response letter concerning the project impacts, USFW concurred with Caltrans that the proposed project, including all conservation measures, may affect but is not likely to adversely affect NSO. SPI will include all conservation measures, including USFWS approved NSO surveys prior to construction, to keep any potential project related impacts to NSO at less than significant.

Foothill Yellow-Legged Frog

The foothill yellow-legged frog (FYLF) is a state Species of Special Concern (SSC) and has no Federal status. The Feather River and Northeast/Northern Sierra clades are listed as threatened; the East/Southern Sierra, West/Central Coast, and Southwest/South Coast clades are listed as endangered. The only clade not listed under CESA is the North Coast Clade; this clade, found in Sonoma County, is not subject to CESA protections but is still a CDFW Species of Special Concern.

FYLF is found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadows. Adults often bask on exposed rock surfaces near streams. When disturbed, they dive into the water and take refuge under submerged rocks or sediments. During periods of inactivity, especially during cold weather, individuals seek cover under rocks in the streams or on shore within a few meters of water. Unlike most other genus *Rana* frogs in California, this species is rarely encountered (even on rainy nights) far from permanent water.

In California, mating and egg-laying usually occur after the end of spring flooding and may commence anytime from mid-March to May, depending on local water conditions (CDFG 2008). Clusters of eggs are attached to the downstream side of submerged rocks. Tadpoles transform in about 15 weeks. Tadpoles require water for at least three or four months while completing their aquatic development. This frog has disappeared from much of its range in California (possibly up to 45 percent) (California Herps 2018)

The rocky, low-flow channel of Austin Creek within the project site would provide suitable habitat for foothill yellow-legged frog, and there are multiple CNDDB occurrences of foothill yellow-legged frog in the Austin Creek watershed.

While biotic surveys within the project site, conducted by county biologists, found no presence of foothill yellow legged frog, the Austin Creek channel at the project site is considered a migratory corridor for individuals upstream and downstream of the

project site. Project construction activities could result in direct impacts to foothill yellow-legged frog individuals if they are found in the project site. Impacts could result from direct loss from construction related activities, grading activities, or refueling of construction equipment. Mitigation Measure BIO-8 would reduce these impacts to a less than significant level.

California Red-legged Frog

The California red-legged frog is federally threatened and considered a state SSC by CDFW. It is recognized by the presence of a diagnostic dorsolateral fold. The California red-legged frog historically ranged from Sonoma County southward to northern Baja California (Stebbins, 2003). Presently, Monterey, San Luis Obispo, and Santa Barbara Counties support the largest remaining California red-legged populations within California. Locally in Sonoma County, the current distribution of California red-legged frog populations is more common in the western portion of the County.

California red-legged frogs use a variety of habitats, including aquatic, riparian, and uplands. They prefer aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of sturdy underwater supports such as cattails (Typha *spp.*). The largest densities of this species are typically associated with dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation (Jennings and Hayes, 1994). The California red-legged frog typically breeds from January to July, with peak breeding occurring in February and March. Softball-sized egg masses are attached to subsurface vegetation, and hatched tadpoles require 11-to-20 weeks to metamorphose. Metamorphosis typically occurs from July to September.

The California red-legged frog uses both riparian and upland habitats for foraging, shelter, cover, and non-dispersal movement. Upland refugia may be natural, such as the spaces under boulders or rocks and organic debris (e.g., downed trees or logs), or manmade, such as certain industrial debris and agricultural features (e.g., drains, watering troughs, abandoned sheds, or stacks of hay or other vegetation). The California red-legged frog will also use small mammal burrows and moist leaf litter as refugia (USFWS, 2010). Adults are predominantly nocturnal, while juveniles can be active at any time of day. Riparian habitat degradation, urbanization, predation by the American bullfrog (*Lithobates catesbeianas),* and historic market harvesting have all reportedly contributed to the decline of the species.

While no protocol surveys were conducted for California red-legged frog, the species was not observed during reconnaissance surveys conducted within the BSA. Marginally suitable in-stream aquatic habitat is present within the BSA, although the rocky, low-flow channel of Austin Creek does not provide potential breeding habitat. At best, the instream habitat could provide seasonal refugia habitat for adult frogs.

There are no historic occurrences listed on the CNDDB for California red-legged frogs within 5-miles of the BSA. While finding California red-legged frogs is highly unlikely in the project site, the Mitigation Measure BIO-6 conducted for other species

for this project would ensure that no California red-legged frogs would be present in the BSA and reducing project related impact to no or to a less than significant level.

Red-bellied Newt

The red-bellied newt (*Taricha rivularis*) is a State Species of Special Concern and has no Federal status. The red bellied newts have the most limited geographical distribution among the three species of genus *Taricha*. They occur in coastal California north of San Francisco Bay in Sonoma, Mendocino and Humboldt Counties, at elevations between 150-450m (amphibiaweb.org). Adult red bellied newts are 5.5 – 7.5 inches long in total length. They are considered a medium-sized salamander with grainy skin that is brownish black on top with a tomato red under belly.

Adults are terrestrial, becoming aquatic when breeding. Breeding migration begins as early as January with adult males entering waters as early as February. These adults will leave waters during heavy rain events returning to water after high flows recede. Typically, breeding takes place from February to May, in clean, rocky streams with moderate to fast flow. The females lay egg masses that are one layer thick with clutch size of about 10 eggs. Many egg masses can be found under a single rock. Temperatures determine the period for the eggs to hatch with known rages of 16-34 days. The larvae stage last approximately 4-6 months with metamorphosis typically occurring in late summer and early fall.

There has been a past observations of a red-bellied breeding ball within the project area, and the site conditions are ideal for all life stages of red bellied newts. Mitigation Measure BIO-6, Mitigation for Amphibians, pursuant to Section 21081.6 of the Public Resources Code of the Sonoma County Permit and Resource Management Department, would reduce any project related impacts to a less than significant level. BIO-6 measures to be carried out by the contractor will be included it the Mitigation Monitoring Plan that will be prepared specially for the Project.

California Giant Salamander

The California giant salamander (*Dicamptodon ensatus*) is a State Species of Special Concern and has no Federal status. The nearest CNDDB occurrence is 1.5 miles from the project area. The project area may serve as a migratory corridor for California giant salamander.

Project related impact (e.g., dewatering) could adversely affect California giant salamander if individuals were present in the project area during construction. Potential direct effects include harassment, injury, and mortality of individuals due to equipment and vehicle traffic. The species may also be affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. In addition, loss of riverine and riparian habitat may have a negative impact on this species. Mitigation Measure BIO-6 would reduce any project related impacts to a less than significant level.

Potential Impacts to Amphibians from the Project and Associated Mitigation Measures

The Project could adversely affect California giant salamander, foothill yellow-legged frogs, and red bellied newts if individuals were present in the Project area during construction. Potential direct effects include harassment, injury, and mortality of individuals due to equipment and vehicle traffic. The species may also be affected if construction activities result in degradation of aquatic habitat and water quality due to erosion and sedimentation, accidental fuel leaks, and spills. In addition, loss of riverine and riparian habitat may have a negative impact on this species.

The proposed project has the potential to result in adverse impacts on California giant salamander, foothill yellow-legged frogs and red bellied newts as identified below:

- Although unlikely, construction related impacts, especially in-channel work, could result in an adverse effect via direct loss (individual mortality) (e.g., due to operation of equipment in or adjacent to the creek channel when flowing or standing water is present). The potential for direct loss only occurs during project construction. Implementation of the avoidance and minimization measures will minimize the potential for direct take.

- Activities related to the construction of the new bridge and roadway approaches would result in some localized loss of vegetation and general disturbance to the soil. Removal of vegetation and soil can accelerate erosion processes in the BSA and increase the potential for sediment to enter Austin Creek. Excessive sedimentation into the stream channel has the potential to reduce habitat quality for these species (e.g. decreasing availability of potential food items including aquatic invertebrates). Implementation of mitigation measure BIO-3 (replacement of lost riparian Habitat) will fully mitigate for any loss of riparian habitat and implementation of mitigation measure BIO-1 (erosion and sediment control) will ensure that disturbed areas are stabilized and appropriate erosion control measures (i.e., silt fencing) have been implemented during, as well as immediately following, construction to minimize and/or prevent erosion and sedimentation effects.

- Construction activities typically include the refueling of construction equipment on location. As a result, minor fuel and oil spills may occur, with a risk of larger releases. Without rapid containment and clean up, these materials could be potentially toxic depending on the location of the spill in proximity to surface water features, including Austin Creek. Implementation of mitigation measure BIO-2 (prevention of accidental spills) will limit the potential for this impact.

Western Pond Turtle

The western pond turtle (*Emys marmorata*) is a state listed species and has no federal status. Western pond turtles are approximately 3.5–7.5 inches in length and drab brown or olive colored, lacking prominent markings on their carapace. The

name “pond” turtle is somewhat misleading as they are often associated with the quiet waters of rivers and streams. Within their aquatic habitat, they are associated with areas that contain underwater refugia such as rocks, submerged vegetation, or holes along a bank (Hays et al., 1999). They also require basking sites, such as partially submerged logs, rocks, mats of floating vegetation, and open mud banks. In colder areas, the turtles may hibernate underwater in bottom mud or in upland sites that are near water and have deep layers of duff. Overwintering and aestivation sites often occur in upland areas with deep layers of duff or leaf litter. The western pond turtle is a dietary generalist, often foraging on the bottom of water features for aquatic invertebrates.

Western pond turtles are long-lived, the maximum lifespan is 50-70 years and require approximately 10 years to reach sexual maturity (Hays et al., 1999). Eggs are typically laid from March through August. Nests are typically located in open areas with good sun exposure and few shrubs or trees and may be a considerable distance from the aquatic site (up to 0.25 mile) (Jennings and Hayes, 1994). Females excavate an upland nest chamber in which the eggs are laid and subsequently buried. Eggs hatch approximately 2.5– 4 months later. Hatchling turtles are thought to emerge from the nest and move to the aquatic site in the spring.

Western pond turtles may use the Austin Creek channel as a migration corridor and could be impacted by project construction activities. Impacts could result from direct loss from construction related activities, or grading activities, or refueling of construction equipment. Mitigation Measure BIO-7, Mitigation Measures for Turtles, would reduce these impacts to a less than significant level.

Critical Habitat and Essential Fish Habitat

The project is within designated Essential Fish Habitat (EFH) for CC chinook salmon and CCC coho salmon. The Magnuson-Stevens Act requires consultation for all federal agency actions that may adversely affect EFH. EFH consultation with NMFS is required by federal agencies undertaking, permitting, or funding activities that may adversely affect EFH. Because there may be localized short-term impacts to designated critical habitat, the County determined the project may have an effect to EFH. Conservation measures to avoid, minimize, mitigate, or otherwise offset adverse effects to EFH have been included in the project design to reduce these impacts to negligible and temporary. A Biological Assessment/Essential Fish Habitat Assessment (BA/EFHA) was submitted to the NMFS for review under Section 7 of the ESA to address potential impacts to EFH. NMFS issued a letter of concurrence on February 24, 2022, stating that with the conservation measures proposed, the project would not adversely affect EFH. Mitigation measures BIO-1(erosion and sediment control), BIO-2 (accidental spills), BIO-3 (riparian habitat), BIO-4 (invasive species) and BIO-5 (salmonids) will be incorporated into the project to minimize potential effects on federally listed species and biological resources, including critical habitat and EFH.

Central California Coast Coho Salmon ESU

The CCC coho salmon ESU was federally listed as threatened in 1996 then reclassified as endangered in 2005. They are also state listed as endangered. The ESU is found in California rivers from Punta Gorda to the north to Aptos Creek in the south. Coho salmon are anadromous; spending 1-2 years in their natal streams before moving downstream to sea and return after spending 1-2 years in the ocean. The CCC coho salmon ESU spawning migration begins in the late-fall or winter after heavy rains have occurred, and generally peak between December and January. Spawning nests (or redds) are generally in the heads of riffles or pools, with loose, coarse gravel, and nearby cover. Both males and females die after spawning (semelparity), although females may guard their nests from predators for up to two weeks.

The listed range of the Central California coast coho salmon ESU includes the Russian River watershed, which includes lower Austin Creek. Coho salmon are known to occur in Austin Creek but have not been detected in or around the project site during site surveys. Juvenile coho salmon may be present in the project area at any time of the year.

Central California Coast Steelhead DPS

The CCC Steelhead DPS was federally listed as threatened in 1997, with the threatened status reaffirmed on January 5, 2006. They are also state listed as threatened. The DPS includes all naturally spawned populations of steelhead in California streams from the Russian River to Aptos Creek, and the drainages of San Francisco, San Pablo and Suisun Bays eastward to Chipps Island.

Steelhead are anadromous rainbow trout. The steelhead on Russian River and its tributaries are “winter-run,” meaning that fish return to their freshwater spawning grounds from late fall to April (NMFS, 2001). Some steelhead survive to return to the ocean then spawn again in subsequent years (iteroparity). Steelhead construct nests called redds in spawning gravel, generally prefer gravel sized 0.5 to 6 inches dominated by 2- to 3-inch gravel (Flosi, et al 1998) and need gravel that is free from excessive sediment that can smother eggs. Egg development is temperature dependent, varying from about 19 days at 60 degrees Fahrenheit to about 80 days at 42 degrees Fahrenheit (NMFS, 2001). Steelhead hatch as ‘‘alevins’’ (a larval life stage dependent on food stored in a yolk sac) and emerge from the gravel as “fry.” In their first summer, fry generally rear in shallow habitats such as pool tailouts, shallow riffles, and edgewater habitats. In winter, they are often found under large boulders in shallow riffles and quiet backwater and edge areas. (Flosi, et al 1998) Cover in the form of boulders, root wads and woody debris provides important summer and winter habitat. As they grow juveniles move into the deeper water of riffles and pools. Steelhead prefer rearing water temperatures between 53 to 58 degrees Fahrenheit and have an upper lethal limit around 75 degrees Fahrenheit (NMFS 2001). Pools provide a cool water refuge for higher summer temperatures. Juvenile steelhead remain in fresh water 1-3 years, migrate to the ocean as “smolts” (typically between March and June) and then spend 2-3 years in the ocean before returning to spawn in their natal stream.

The habitat in then project area may support multiple steelhead life stages, though only juvenile steelhead have been observed during the site surveys. The project area is known to serve as a migratory corridor for steelhead traveling to spawning grounds in the upper watershed.

Adult steelhead could be present at the site during spawning season from late fall, with sufficient early season rain events, and into April, when water levels are at their maximum in Austin Creek channel. Juvenile steelhead may be present in the project area at any time of year.

California Coast ESU Chinook

The CC chinook ESU was federally listed as threatened in 1999, with the threatened status reaffirmed in 2005. This ESU is also state listed as threatened. They are anadromous, semelparous, and the largest of the Pacific salmon species. Chinook salmon prefer rivers with deep, cold, fast-moving water, and gravel substrates. During the freshwater portion of their life history, chinook does not feed. Both males and females die after spawning. After eggs are deposited, it takes 3-4 months for them to hatch.

California coastal chinook salmon are known to occur in the main stem of the Russian River and could access the lower Austin Creek. It would be unlikely for Chinook Salmon adults to migrate to the higher creek, around the project site, due to lack of adequate habitat for the species. Surveys by CDFW from 1957-2000, did not find chinook salmon in or around the project site (CDFG, 2006). The reach within the project action area is not designated critical habitat. Take is unlikely.

Potential Impacts to Salmonids from the Project and Associated Mitigation Measures

The project as proposed is designed not to have adverse impacts to listed salmonids. All work is proposed to take place in dry weather and dry channel conditions. Water would not be present in the project area during construction and no work is proposed to take place in flowing water conditions. Impacts to fish would be to less than significant with the implementation of measures included in BIO-5-Mitigation for salmonids, listed below.

Incidental take of juvenile coho salmon and steelhead was granted in a biological opinion on the King Ridge Road Bridge Replacement Project, issued by NMFS on January 31,2025. SPI will obtain an Incidental Take Permit (ITP) from CDFW to mitigate for any take of salmonid species. Mitigation type and amount will be determined through discussions between the county and CDFW and the ITP will be finalized and issued to the county prior to construction.

Removal of riparian vegetation in the temporary disturbance areas could potentially affect coho salmon and steelhead indirectly through loss of shade. However, this impact would be temporary with incorporation of mitigation measure BIO-3 (replacement of lost riparian habitat) that will reduce impacts to a less than

significant level for any loss of riparian habitat. Continuous riparian vegetation is also present upstream and downstream of the project area to provide shade to any coho salmon and steelhead in the project area during construction. Since the work is planned to take place when water is not present in the channel, it is not expected that there will be turbidity impacts as a result of project construction. Mitigation measure BIO-1 (erosion and sediment control) will ensure that disturbed areas are stabilized and appropriate erosion control measures (i.e., silt fencing) have been implemented during, as well as immediately following, construction to minimize and/or prevent erosion and sedimentation effects. Additional measures included in BIO-5 (salmonids) will ensure impacts to salmonids are less than significant.

Migratory Birds

Most birds in the United States, including non-status species, are given special protection under the Migratory Bird Treaty Act of 1918. Riparian trees and street trees in the project area may provide nesting habitat for songbirds or raptors. The bridge itself does not show any evidence of swallow nesting.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

BIO- 1- Mitigation Measures for Erosion and Sedimentation Control

Erosion control measures shall be implemented during construction of the proposed project. These measures shall conform to the provisions in the Caltrans Standard Specifications and the special provisions included in the contract for the project. Such provisions include the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which describes and illustrates the of best management practices (BMPs) in the project site. Erosion control measures to be included in the SWPPP or to be implemented by the County include the following:

- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. In channel construction will be conducted from June 15-October 15 and upland construction will likely occur throughout the year as long as work activities comply with the conservation and avoidance and minimization measures identified herein and for the protection of other sensitive or special-status plant or animal species. For upland construction activities (above the top of bank) that must take place during the late fall, winter, or spring, temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.

- 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.

- At completion of construction and in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, weed-free mulch shall be applied to disturbed areas 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 shall be installed prior to any clearing or grading activities. Further, sediment built up at the base of BMPs will be removed before BMP removal to avoid any accumulated sediments from being mobilized post-construction.

- If temporary stock piling is used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a stockpile drains into a surface water feature, catch basins shall be constructed to intercept sediment before it reaches the feature. Stockpiles shall be graded and vegetated with native species or covered by other means to reduce the potential for erosion.

- Sediment control measures (BMPs) shall be in place prior to the onset of the rainy season and will be monitored and maintained to be in good working condition until disturbed areas have been revegetated with native species.

BIO-2- Mitigation Measures to Prevent Accidental Spills and Pollution

Construction specifications shall include the following measures to reduce potential impacts to vegetation and aquatic habitat resources in the project area associated with accidental spills of pollutants (e.g., fuel, oil, asphalt and grease):

- A site-specific spill prevention plan shall be prepared, approved by the County and 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 shall be constructed to prevent spilled materials from reaching surface water features.

- Where feasible, equipment and hazardous materials shall be stored at least 50 ft 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 an area at least 50 ft away from Austin Creek or within an adequate fueling containment area.

- Equipment operating within the channel shall use non-toxic vegetable oil for operating hydraulic equipment opposed to traditional hydraulic fluids that can contain a wide range of chemical compounds.

- Place plastic materials (or similar) under asphaltic concrete (AC) paving equipment while not in use, to catch and/or contain drips and leaks.

- Minimize sand and gravel from new asphalt from getting into storm drains, streets, and creeks by sweeping. Old or spilled asphalt must be recycled or disposed as approved by the Resident Engineer.

- AC grindings, pieces, or chunks used in embankments or shoulder backing must not be allowed to enter any storm drain or watercourses. Install silt fence until structure is stabilized or permanent controls are in place.

- Collect and remove all broken asphalt and recycle when practical; otherwise, dispose in accordance with Standard Specification 7-1.13 and to an appropriately permitted site.

- During deck pothole patching application and sweeping operations, petroleum or petroleum covered aggregate must not be allowed to enter any storm drain or water courses. Use silt fence until installation is complete.

- Do not allow Portland Concrete Cement (PCC) or slurry to enter storm drains or watercourses.

BIO-3- Mitigation for Loss of Riparian Habitat

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

- Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to ensure that impacts to riparian vegetation outside of the construction area are minimized.

- Riparian habitat areas temporarily disturbed shall be replanted using riparian species that have been recorded along Austin Creek in the project area, including Coast redwood *Sequoia sempervirens*, Douglas fir (*Pseudotsuga menziesii),* Live oak (*Quercus agrifolia),* Tan oak (*Lithocarpus densiflora),* Black oak (*Quercus kelloggii),* Scrub oak (*Quercus berberidfolia),* Big leaf maple (*Acer macrophylum),* Oregon ash (*Fraxinus latifolia),* White alder (*Alnus rhombifolia),*

Box elder (*Acer negundo),* California bay (*Umbellularia californica),* and Arroyo willow (*Salix lasiolepis).*

- Onsite habitat creation/restoration shall occur in areas that have been disturbed during project construction and within interstitial spaces of the RSP. The amount of habitat created/restored shall be at a 3:1 ratio of new plantings per large (6 in. in diameter at breast height) woody plant removed. This replanting ratio will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project.

- Plant spacing intervals will be determined as appropriate based on-site conditions following construction.

- Revegetation monitoring would be implemented in compliance with regulatory permit conditions (typically 5 years in duration) and be initiated immediately following completion of the planting. The monitoring surveys will consist of a general site walkover evaluating the survival and health of riparian plantings, signs of drought stress, weed or herbivory problems, and the presence or trash or other debris. Within the mitigation area, less than 50 percent total mortality of planted species (including container stock and hardwood cuttings) would be considered a success, unless other permitting documents require greater survival rates. Volunteer growth of native species would be counted toward the vegetation coverage in the mitigation area. If monitoring results indicate that revegetation efforts are not meeting established success criteria, corrective measures would be implemented.

BIO-4- Mitigation to Prevent of Spread of Invasive Species

The following measures shall be implemented to prevent the spread of invasive species in the action area:

- If project implementation calls for mulches or fill, they will be weed free

- Any seed mixes or other vegetative material used for re-vegetation of disturbed sites will consist of locally adapted native plant materials.

BIO-5- Mitigation for Salmonids

- Construction outside of the creek channel may occur any time of the year, provided all BMPs necessary to protect the creek are in place and well maintained.

- Construction below top of bank may occur between June 15 and October 15, provided all BMPs necessary to protect the creek are in place and well maintained.

- Regulatory approval will be obtained for all work within potentially jurisdictional areas, including approval form the USACE, RWQCB, and CDFW. All work within these areas will conform to any conditions imposed by the regulating agencies.

- Prior to any clearing, grubbing, pruning, or groundbreaking activity, the limits of construction shall be fenced with temporary high-visibility construction fencing to protect environmentally sensitive areas, protect all riparian vegetation beyond that which must be cleared for construction access, and prevent any equipment from unnecessarily extending the work area or entering the wetted channel. In addition, silt fencing shall be installed at the base of construction fencing to prevent debris from entering the creek. All fencing shall be removed upon project completion.

- Prior to construction, the contractor shall be required to prepare an Accidental Spill Prevention and Cleanup Plan. This plan shall include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times.

- To minimize fluid leaks during operation, refueling, and maintenance of stationary equipment spill control absorbent material shall be in place underneath this equipment at all times to capture potential leaks.

- All stockpiling of construction materials, equipment, and supplies, including storage of chemicals, refueling and maintenance, shall occur approximately 100 feet outside the creek channel. No equipment shall be washed where runoff could enter the creek.

- All refueling and maintenance of equipment, other than stationary equipment, shall occur outside the creek's top-of-bank. Receptacles containing fuel, oil, or any other substance that may adversely affect aquatic resources shall be stored outside of the channel. Any hazardous chemical spills shall be cleaned immediately.

- The County will not allow any motorized equipment to be left within the creek channel (top of bank to top of bank) overnight, unless a container or similar method is securely placed beneath the equipment to catch any fluid leakage. All contained fluids will be disposed of in a permitted manner.

- The County shall require the contractor to use a drilling mud and slurry seal that is nontoxic to aquatic life for all drilling activities related to construction of project. All drilling muds and fluid shall be contained on-site in tanks and disposed of in a permitted manner. Fluids from saw cutting shall be collected and not be allowed to flow into the creek.

- No equipment, including concrete trucks, shall be washed within the channel of the creek, or where wash water could flow into the channel. Prior to project construction, the contractor shall establish a concrete washout area for concrete trucks in a location where wash water will not enter Austin Creek. The washout

area shall follow the practices outlined in the North Coast Regional Water Quality Control Board Erosion and Sediment Control Field Manual or equivalent guidelines. Substitution of the designated concrete washout area or methods shall require prior approval of PRMD and SPI.

- All water that comes in contact with wet concrete must be pumped directly into tanks and disposed of at a permitted location.

- If work is to occur on the roadway bridge approaches during the period October 15 to June 15, all drainage inlets within the project site shall be protected from receiving polluted storm water through the use of filters such as fabrics, gravel bags, straw wattles, or other appropriate BMPs.

- Water encountered during construction of the bridge foundations will be pumped upslope for disposal on nearby uplands in a way that would prevent it from flowing back into the creek or pumped directly into tanks and disposed of at a permitted location.

- All workers will ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers. The trash containers shall not be left open and unattended overnight.

- By October 15, the County will require that all disturbed areas around the permanent and temporary bridge abutments be re-graded to match the surrounding topography. Seed and straw will be placed on these and all other disturbed areas in the project site. A jute mesh type or equivalent matting shall be placed over the straw, installed per the manufacturer's instructions. This matting shall have no plastic incorporated into it. Substitution of materials or erosion control methods shall require prior approval of PRMD and SPI.

- The project site shall be inspected following the first heavy rain, during the middle of the rainy season following construction. During each visit areas of significant erosion or erosion control device failure shall be noted and appropriate remedial actions taken.

BIO-6- Mitigation measures for Migratory Birds

The project will minimize permanent loss of nesting sites. However, some removal of riparian vegetation and street trees is required. Tree removal during times of nesting could result in negative effects to the young of nesting birds. The following avoidance and minimization measure will reduce any potential impact to breeding birds:

- The County shall only allow trees to be removed from the project site after August 31, and before February 15 of the following year, when bird nesting is most likely avoided, unless a qualified biologist has inspected the site and determined that the tree removal will not affect nesting birds.

- If work is conducted during the nesting season, pre-construction surveys for nesting birds shall be conducted no more than 3 days prior to ground disturbing activities. If an active nest is found, a qualified biologist, in conjunction with CDFW, shall determine the appropriate buffer size and delineate the buffer using fencing, pin flags, yellow caution tape, and etc. During construction, the qualified biologist shall conduct regular monitoring (at CDFW approved intervals) to evaluate the nest(s) for potential disturbances associated with construction activities.

  Construction within the buffer shall be prohibited until the qualified biologist determines the nest is no longer active. If an active nest is found after the completion of the pre-construction surveys and after construction begins, all construction activities shall stop until a qualified biologist has evaluated the nest and erected the appropriate buffer around the nest. If establishment of the buffer is not feasible, CDFW and/or USFWS shall be contacted for further avoidance and minimization guidelines.

BIO-7 – Mitigation Measures for Special Status Plants

Surveys will be conducted to determine the presence or absence of special status plants within the project area. If special-status plants are documented within the Project Area, a qualified biologist shall determine if the Project would constitute a significant impact under CEQA. If so, then a Habitat Mitigation and Management Plan. (HMMP) shall be drafted to reduce these impacts to less than significant.

The HMMP shall detail the existing population(s) and specific microhabitat conditions. Unoccupied potential habitat shall be targeted as a donor site(s) for relocated impacted special-status plants. Because all the potential special-status plants are annuals, the HMMP shall detail seed collection and storage, donor site preparation (e.g., weed removal, disking), and seed distribution to maximize germination.

Annual monitoring methods and performance criteria shall be developed and included in the HMMP. Finally, the HMMP shall include contingency measures and adaptive management techniques to provide some assurance of success.

BIO-8 Mitigation Measures for Amphibians

- Because amphibians may move into and out of the project area at any time, a pre-construction survey for the species is necessary to confirm its status (presence/absence) on the site immediately prior to the onset of project construction. Therefore, a qualified biologist shall conduct a minimum of one survey of the project area for these amphibians. The survey shall be conducted a maximum of one week prior to construction. If individuals of any of these species is found within a construction impact zone, the biologist shall move it to a safe

location within suitable habitat based upon their extensive experience working with the species.

- If amphibians are encountered during construction, activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the individual will not be harmed. A qualified biological monitor may need to be present to survey the construction site each morning prior to starting construction, any frogs encountered shall be moved to a safe location with suitable habitat. Alternatively, any frogs encountered during construction shall be allowed to move away on their own. Any trapped, injured, or killed frogs shall be reported immediately to CDFW.

BIO-9 Mitigation Measures for Western Pond Turtles

- Because turtles may move into and out of the project site at any time, a pre-construction survey for the species is necessary to confirm its status (presence/absence) on the site immediately prior to the onset of project construction. Therefore, a qualified biologist shall conduct a minimum of one survey of the project site for pond turtles and their nests. The survey shall be conducted a maximum of one week prior to construction. If a pond turtle is found within a construction impact zone, the biologist shall move it to a safe location within similar habitat. If a pond turtle nest is found, the biologist shall flag the site and determine if construction activities can avoid affecting the nest. If the nest cannot be avoided, the County shall contact CDFW to determine appropriate measures.

- If a western pond turtle is encountered during construction, activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that the turtle will not be harmed. A qualified biological monitor may need to be present to survey the construction site each morning prior to starting construction, any frogs or newts encountered shall be moved to a safe location with suitable habitat. Alternatively, any frogs encountered during construction shall be allowed to move away on their own. Any turtles encountered during construction shall be allowed to move away on their own. Any trapped, injured, or killed turtles shall be reported immediately to CDFW.

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

Comment:
The King Ridge Road Bridge over Austin Creek and the Project BSA are directly surrounded by open space with limited rural residential in the vicinity. The natural communities of concern within the BSA itself include riparian habitat on the banks of Austin Creek, Waters of the U.S., and designated Critical Habitat for the CCC coho salmon and CCC steelhead, and wildlife corridors.

Riparian Habitat Types in the Project Area

Riparian Forest

Riparian Forest lines both banks of the channel and includes alder, bay, big leaf maple, redwood, and tanoak. Riparian vegetation is dominant within the BSA along Austin Creek. This community can be classified as White Alder Riparian Forest (Holland 1988). Dominant species include White Alder (*Alnus rhombifolia*), Valley Oak (*Quercus lobata*), and Arroyo Willow (*Salix lasiolepis*). Stands of the White Alder are relatively young, indicating an early-seral state, and regular disturbance events in the form of mudflows and landslides.

Barren and sparsely vegetated areas of the Austin Creek Channel are also mapped within the BSA. Water flow moves southwesterly through this reach of Austin Creek. The reach provides migration, spawning and rearing habitat for steelhead and coho salmon. The channel substrate consists of gravel and cobble. The channel morphology is an aggraded stream with steep banks. The reach of Austin Creek in the BSA is relatively confined within the creek bed leading to the existing bridge where it is further constrained from the two bridge piers and the walls of the abutments. The low flow conditions in the summer/fall months are mainly from subsurface flow sources.

Grassland

Small areas of Grassland are mapped within the BSA. The Sonoma Vegetation Map mapping unit for grassland is not able to differentiate between grassland types, e.g., between native and non-native grassland. However, site specific information confirms that the slopes to the south of the bridge contain grassland, dominated by non-native species. Scattered live oaks are found within the grassland habitat. An old fruit orchard is also in this area. There are no known sensitive plants listed within the BSA in the Austin Creek drainage on the California Native Plant Society (CNPS) Inventory or Department of Fish and Wildlife's Natural Diversity Database.

Areas of Disturbance

Developed and disturbed areas within the BSA include the existing King Ridge Road and associated culverts, and the existing King Ridge Road Bridge and associated turnouts and road shoulders and abutments. The staging areas are located on both sides of the bridge. Vegetation adapted to disturbance grows on the margins of these areas, including non-native annual grasses and herbs. Access will be from the large road shoulder/ turnout just above the existing bridge down to the top of the bank, this area is partially vegetated with riparian trees and understory vegetation.

Potential Impacts to Riparian Habitat from the Project

The proposed project may result in direct permanent impacts on a small area of riparian and upland forest, including the removal of approximately 38 individuals of various species, with a diameter at breast height (dbh) greater than 6 inches. These impacts will be due to the construction of the new bridge, including the placement of the abutment support piers and grading of the hillsides and approaches to modify the alignment of the road to the new bridge. While this is the case, mitigation measures for riparian impacts will compensate for this loss. Much of Austin Creek shading occurs from the large number of coniferous trees on the steep canyon walls above the project area.

Riparian habitat considered sensitive natural community by USACE and CDFW is present in the project area. Construction of the new bridge will result in direct impacts to a small area of riparian forest. Potential impacts to this sensitive community and recommended avoidance and mitigation measures are addressed in effort to limit disturbance to the least amount of area possible.

The project shall be designed and constructed to avoid and minimize removal of riparian vegetation to the maximum extent practicable. Staging areas and construction access routes will avoid encroachment into riparian vegetation where practicable and minimize encroachment where complete avoidance is not practicable. “Avoided” riparian habitat will be clearly identified in the construction drawings and contractor work plans. Exclusionary fencing will be installed to mark boundaries of avoided riparian areas. The exclusionary fencing shall be inspected and maintained on a regular basis throughout project construction. Additionally, impacts to riparian habitat will be compensated for as described in mitigation measure BIO-3 (Replacement of Lost Riparian Habitat).

Waters of the United States

Austin Creek is a perennial stream that discharges to the Russian River. As such, it is subject to jurisdiction under both federal (USACE) and state (North Coast Regional Water Quality Control Board) regulations. The limit of USACE jurisdiction is the ordinary high water mark (OHWM); RWQCB jurisdiction extends to the top of bank.

Delineation of waters of the United States within the project area by Permit Sonoma Natural Resources staff on October 27, 2020. The potential jurisdictional waters include the main Austin Creek Channel and the northwest tributary that connects to Austin Creek just downstream of the bridge. These features occupy a total of 0.41 acre of the project area. Table 1 provides a summary of permanent construction impacts by activity type above and below the OHWM.

Potential Impacts to Waters of the United States from the Project

The new bridge design uses abutments that will not be located within the OHWM as are portions of the abutments of the existing bridge. Due to the flow velocities of the Austin Creek, scour protection from creek flows will be required; the scour protection is expected to consist of approximately 102 sq. ft. RSP placed within jurisdictional

waters of Austin Creek. Project related activities resulting in permanent impacts is from the new RSP placement and temporary impacts are from the instream gravel workpad, water diversion, and the construction of the new bridge (Table 1).

Table 1. Project Related Permanent Impacts to Waters of the U.S.

Activity	Impact Below the OHWM (square feet)	Temporary Impact Below the OHWM (square feet)	Temporary Impact below the OHWM (linear feet)
Gravel Workpad	0	2,400	0
Water Diversion			120
RSP	176	0	

Executive Order 11990, Protection of Wetlands (1977), calls for no net loss of habitats referred to as wetlands and established a national policy to avoid adverse effects on wetlands wherever there is a practicable alternative. Any jurisdictional areas impacted by the project would be replaced in kind and on-site at a 1:1 ratio to ensure no net loss. Accordingly, a wetland only practical finding is not required at this time.

Wildlife Corridors

The wildlife community includes such species as Mule Deer (*Odocoileus hemionus*), Mountain Lions (*Felis concolor*), Black Bears (*Ursus americanus*), Coyotes (*Canus latrans*), and Western Grey Squirrels (*Sciurus griseus*), as well as several bird species (Schoenherr 1992). In prehistoric times, Tule Elk (*Cervus elaphus*) would also have been common in this area. Austin Creek supports several fish species, including coho salmon, Chinook Salmon, Steelhead, and Rainbow Trout (*Salmonidae spp.*), and Black Bass (*Micropterus salmoides*), as well as bullfrogs (*Lithobates catesbeianus*) and other amphibians.

The reach of Austin Creek within the project area likely serves as a movement corridor for common wildlife species as well as aquatic species to areas of high quality terrestrial and aquatic habitat. Because the project area is surrounded by very large areas of undeveloped land, terrestrial wildlife movements are not necessarily restricted to the riparian corridor. The existing King Ridge Road is a narrow, low-volume road and is not a current barrier to wildlife movement. Furthermore, the project related impacts will not decrease or significantly impact this habitat connectivity. Austin Creek is a migratory corridor for steelhead and provides spawning habitat for red-bellied newt. The project area currently does not include any barriers to fish passage.

Potential Impacts to Wildlife Corridors from the Project

The creek will be partially obstructed and there would be elevated noise level in the area by construction activities. The project site and the project area will be available for wildlife movement after hours. The project is only expected to require a single working season. Any impact would be temporary as wildlife will still be able to use the site as a migratory corridor both during and after construction. Impacts to amphibians or turtles using the project channel as a migratory corridor would be reduce to a less than significant level with the implementation of mitigation measures BIO 8 and 9. (1,31)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

BIO-10: Mitigation for Riparian Vegetation

The project shall be designed and constructed to avoid and minimize removal of riparian vegetation to the maximum extent practicable. Staging areas and construction access routes will avoid encroachment into riparian vegetation where practicable and minimize encroachment where complete avoidance is not practicable. “Avoided” riparian habitat will be clearly identified in the construction drawings and contractor work plans. Exclusionary fencing will be installed to mark boundaries of avoided riparian areas. The exclusionary fencing shall be inspected and maintained on a regular basis throughout project construction.

BIO-9- Mitigation Measure for Waters of the United States/ Waters of the State

To the extent practicable, the discharge of dredged or fill material into “waters of the United States,” including wetlands shall be avoided (this also includes waters not subject to USACE jurisdiction, but subject to RWQCB jurisdiction). However, complete avoidance is not feasible due to the need for the placement of new piers, thus the following measures shall be implemented to avoid or minimize the potential for project-related impacts on “Waters of the United States.”

- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.

- 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.

- 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 disturbed areas 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 shall be installed prior to any clearing or grading activities.

- If temporary stockpile sites are used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a stockpile drains into a surface water feature, catch basins shall be constructed to intercept sediment before it reaches the feature. Stockpile sites shall be graded and vegetated to reduce the potential for erosion.

- 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.

- Any new or previously excavated gravel material placed in the channel shall washed at least once and have a cleanliness value of 85 or higher based on Caltrans Test No. 227.

- A site-specific spill prevention plan 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 shall be constructed to prevent spilled materials from reaching surface water features.

- Where possible, equipment and hazardous materials shall be stored at least 50 ft 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 an area at least 50 ft away from the Austin Creek or within an adequate fueling containment area.

- Per Executive Order 11990, Protection of Wetlands (1977), no net loss of habitats referred to as wetlands, any jurisdictional areas impacted by the project would be replaced in kind and on-site at a 1:1 ratio to ensure no net loss.

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

Comment:

USACE regulates "Waters of the United States", including adjacent wetlands, under Section 404 of the federal Clean Water Act. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. Potential wetland areas are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act. Areas that are inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as "other waters" and are often characterized by an OHWM. The discharge of dredged or fill material into a Waters of the U.S. (including wetlands) generally requires a permit from the USACE under Section 404 of the Clean Water Act.

"Waters of the State" are regulated by the Regional Water Quality Control Board (RWQCB) under the State Porter-Cologne Water Quality Control Act. Waters of the State are defined by the Porter-Cologne Act as any surface water or groundwater, including saline waters, within the boundaries of the State. The RWQCB jurisdiction includes "isolated" wetlands and waters that may not be regulated by USACE under Section 404 (such as roadside ditches). Section 401 of the Clean Water Act specifies that any activity subject to a permit issued by a federal agency must also obtain State Water Quality Certification (401 Certification) that the proposed activity will comply with state water quality standards. If a proposed project does not require a federal permit but does involve dredge or fill activities that may result in a discharge to Waters of the State, the RWQCB has the option to regulate the dredge and fill activities under its state authority through its Waste Discharge Requirements (WDR) program.

There is not expected to be any impacts to federal wetlands as a result of the project that the County will obtain a 404 permit from the USACE, 401 permit from the RWQCB and 1602 Streambed Alteration Agreement from CDFW will be required. (1,31)

Significance Level:

No Impact

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?

Comment:

Austin Creek is an east-west movement corridor and spawning habitat for Central California Coast steelhead, which use the creek for both migration and spawning. Replacement of the bridge will not result in the temporary disruption of fish moving up and downstream due to the project taking place when water is not present. To ensure that hydraulic conditions are suitable, and the temporary work pad would not impede the movement of aquatic organisms in the event of a storm, the culverts have been designed within the proposed construction work pad and would be installed according to NMFS' *Guidelines for Salmonid Passage at Stream Crossings* (NMFS 2001). Other aquatic and terrestrial wildlife undoubtedly move within and through the area in and around the project area. The creek likely attracts wildlife in the area due to the seasonal presence of water. Amphibians and turtles may move through the creek corridor when dry. Limiting construction to daytime hours, will allow wildlife to move through the area during the hours when construction is not actively occurring.

The area outside of the project area consists primarily disturbed uplands and are unlikely to be used as core habitat. Upstream of the project area there is semi continuous hardwood forest that has interspersed residential and grazing land in the upper watershed. In addition, the impacts to wildlife are temporary and will only occur during the duration of construction of the project. (1, 31)

Potential Impacts to Migratory Birds from the Project

Migratory bird species may nest in or adjacent to the project area. Construction disturbance during the breeding season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. The proposed project may also result in a small, temporary reduction of foraging or roosting habitat for migratory bird species. (1,6,8,18,31,32,33,42)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Implementation of mitigation measure BIO-3 (replacement of lost riparian habitat), and BIO-9 (migratory birds), the project is not expected to result in a significant impact on migratory birds.

Implementation of Mitigation Measure BIO-5 (salmonids) BIO-8 (foothill yellow-legged frogs), and BIO-9 (western pond turtles), would reduce potentially significant impacts to special status species using the site as a corridor to a less than significant level.

e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?

Comment:

Regulatory Framework

The following discussion identifies local environmental regulations that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

Tree Protection Ordinance

Chapter 26, Article 88. Sec. 26-08-010 (m) of the Sonoma County Code contains a tree protection ordinance (Sonoma County 2013). The ordinance designates 'protected' trees as well as provides mitigation standards for impacts to protected trees. While this ordinance is not applicable to County Public Works projects, it is used as a guide for determining impacts and appropriate mitigation measures.

Sonoma County General Plan

The *Sonoma County General Plan 2020* (Sonoma County 2008) Land Use Element and Open Space & Resource Conservation Element both contain policies to protect natural resource lands including, but not limited to watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors. Policy OSRC-8b establishes streamside conservation areas along designated riparian corridors.

Riparian Corridor Ordinance

The RC combining zone is established to protect biotic resource communities, including critical habitat areas within and along riparian corridors, for their habitat and environmental value, and to implement the provisions of the General Plan Open Space and Resource Conservation and Water Resources Elements. These provisions are intended to protect and enhance riparian corridors and functions along designated streams, balancing the need for agricultural production, urban development, timber and mining operations, and other land uses with the preservation of riparian vegetation, protection of water resources, floodplain management, wildlife habitat and movement, stream shade, fisheries, water quality, channel stability, groundwater recharge, opportunities for recreation, education and aesthetic appreciation and other riparian functions and values.

The project as proposed will not conflict with the above policies and ordinances. The bridge has been designed so that vegetation removal will be avoided and minimized to the maximum extent feasible. Riparian trees removed having greater than 6 inches diameter breast height will be replaced at a minimum 3:1 ratio. Mitigation measure BIO-3 (Loss of Riparian Habitat) will further ensure the project has a less than significant impact on vegetation.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

BIO-3 (Replacement of lost Riparian Habitat)

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?

Comment:
Currently, there are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved habitat conservation plans that cover the project area.

Significance Level:

No Impact

5. CULTURAL RESOURCES:

In 2022, AECOM Archaeological Consulting was retained by Caltrans to prepare an Archeological Survey Report for the King Ridge Road Replacement Project. Caltrans determined in a November 24, 2021, email correspondence with SPI that an HRER would not be required for this project.

Area of Potential Effects (APE)

The APE represents the maximum extent of project-related activities for the proposed undertaking and contains all areas that could be permanently or temporarily affected by the proposed project. No historic properties are present in the APE. The APE encompasses Austin Creek, which runs approximately 16 miles south of its headlands to join the Russian River. The terrain around the APE is rugged, forested, and mountainous.

The APE includes the entirety of the Caltrans Right-of-Way (ROW); portions of the parcel APNs 107-090-004, 107-090-010, and 107-090-012 for temporary use for staging, and portions of parcel APNs 107-090-011 and 107-090-012 for permanent use.

The vertical APE represents the maximum subsurface vertical extent of project-related activities for the proposed undertaking. Although this varies throughout the project area, depending on the project activity, the most substantial vertical impacts associated with the project will be the installation of CIDH piles, at a maximum subsurface depth of 40 feet. Other vertical impacts include 15 to 20 feet of cut into the adjacent hillside to create space for the new road alignment and construction of a retaining wall to support the newly cut slope, which will have approximately 6 feet of subsurface disturbance. Roadway improvements are expected to have 3 feet of subsurface disturbance.

Archaeological Survey Report (ASR)

A background study, including a records search at the Northwest Information Center (NWIC) in Rohnert Park, was conducted in September7, 2021 by AECOM archaeologist, Karin Beck. Background research and literature review identified no prehistoric or historic-era archaeological resources or isolates in the APE or within ¼-mile of the APE.

A pedestrian survey of the APE was conducted by AECOM archaeologist Kathleen Kubal in February 2022. Most of the APE, all except the creek bed, was surveyed. No archaeological resources were identified during the survey. Additionally, the background research and literature review identified no prehistoric or historic-era archaeological resources or isolates in the APE or within ¼-mile of the APE.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits. If human remains are encountered during construction, all work in that area must halt and the Contra Costa County Coroner must be contacted pursuant to California Public Resources Code Sections 5097.94, 5097.98, and 5097.99.

AB-52 Consultation

Local tribes were notified of the project with a request for AB-52 consultation pursuant to PRC 21080.3.1 and 21080.3.2 on January 6, 2022. No requests for consultation were received from the tribes contacted.

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Comments:

Caltrans Archeological staff determined that there were no eligible resources that could be considered historical in the APE and therefore, no HRER preparation was required for the project.

Significance Level:

No Impact

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Comment:
There are no known archaeological resources on the site based on the project level archaeological investigations. Additionally, per AB-52 requirements, local tribes have been notified of the project. Initial responses from the tribes suggest no concerns.

The project has potential to uncover previously unknown materials during construction. Mitigation Measure CUL-1 would reduce this potentially significant impact to a less-than-significant level. (1, 34)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

Mitigation Measure CUL-1: Cultural Resources

If archaeological or paleontological materials are discovered during project construction, construction shall cease in the immediate vicinity of the find until a qualified archaeologist is consulted to determine the significance of the find and has recommended appropriate measures to protect the resource. Further disturbance of the resource shall not be allowed until those recommendations deemed appropriate by the County have been implemented.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Comment:
No burial sites are known in the vicinity of the project, and most of the project site has already been disturbed by past construction. Implementation of Mitigation Measure CUL-2 would reduce potentially significant impacts to human remains to a less-than-significant level. (34)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

Mitigation Measure CUL-2: Human Remains

In the event that human remains are unearthed during construction, state law requires that the County Coroner be notified to investigate the nature and circumstances of the discovery. At the time of discovery, work in the immediate vicinity would cease until the coroner permitted work to proceed. If the remains were determined to be prehistoric, the find would be treated as an archaeological site and

the mitigation measure CUL-1 would apply.

6. 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?

Comment:
The project will not change the operational capacity of King Ridge Road, and such would not cause wasteful, inefficient or unnecessary consumption of energy resources.

During construction, the use of heavy equipment running on diesel fuel will be required. Standard construction BMPs will be included in the project construction specifications and be required project condition to be adhered to by the selected contractor. These construction phase BMPs include restricting the idling time for all construction vehicles and limiting construction times to Monday through Friday, from 7 AM to 7PM. Consumption of energy is necessary, but will the conditions proposed wasteful and inefficient consumption of energy would be less than significant. (1)

Significance Level:
Less than Significant Impact

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Comment:
The replacement of a bridge structure on an existing roadway will not conflict or obstruct any plans for renewable energy or energy efficacy standards. (1)

Significance Level:
No Impact

7. GEOLOGY AND SOILS:

Soils in and around the project area are mapped as 70 to 85 percent Hugo series, which consist of gravelly sandy clay loam that developed on forested slopes prior to the arrival of humans in California, and as 3 to 20 percent Atwell series. Although Atwell soils are young, dating to the late Holocene, they typically occupy concave or irregular, unstable slopes in areas with high drainage density, where slips and slides are common—a setting that is not conducive to human habitation or site preservation. Given the erosive nature of the project setting, the likelihood of encountering buried archaeological deposits is low.

Geology in and around the project site is mapped as Franciscan Complex graywacke and mélange (*KJfs*) dating to the Cretaceous and Jurassic periods (Blake et al., 2002). The steep, uneven terrain in the project area is characteristic of Franciscan Complex landscapes, which commonly contain resistant blocks of Franciscan rock, such as graywacke, chert, and basalt intermixed with weaker Franciscan rocks, such as sheared shale of the mélange. Where rocks are weak, large, deep, landslides are common. Quaternary landslide deposits (*Qls*) are mapped north and northwest of the APE. Quaternary alluvial fan deposits (*Qal*) are mapped in the channel of Big Austin Creek north of the project site, but do not extend into the project, which is too steep and incised for aggradation.

The King Ridge Road Bridge is in a rural setting in the mountains of the California Coast Range, at an elevation of 230 to 260 feet above sea level. The northwest-trending Santa Rosa Valley is 11 miles to the east. The Pacific Ocean is 12 miles due west, or 7 miles to the southwest. Austin Creek, which runs approximately 16 miles south of its headlands to join the Russian River. The terrain around the bridge is rugged, forested, and mountainous.

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Comment:
The project site is outside of fault, liquefaction, and landslide zones when the location was entered into the California Department of Conservation Alquist-Priolo fault map (https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/).

The Peak Ground Acceleration at the site is estimated to be 0.58g. The site is not prone to liquefaction and the potential for lateral spreading is low (HDR, 2021).

Significance Level:

No Impact

ii. Strong seismic ground shaking?

Comment:
All of Sonoma County is subject to seismic shaking that would result from earthquakes along the San Andreas, Healdsburg-Rodgers Creek, Maacamas, and other faults. Predicting seismic events is not possible, nor is providing mitigation that

can entirely reduce the potential for injury and damage that can occur during a seismic event. The design of the bridge structure will follow the Caltrans Seismic Design Criteria. Using accepted geotechnical evaluation techniques and appropriate engineering practices, potential injury and damage can be diminished, thereby exposing fewer people and less property to the effects of a major earthquake. Project conditions of approval require that bridge designs for construction meet all standard seismic and soil test/compaction requirements. The project would therefore not expose people to substantial risk of injury from seismic shaking. (9, 37)

Significance Level:

Less than Significant Impact

iii. Seismic-related ground failure, including liquefaction?

Comment:
Strong ground shaking can result in liquefaction, the sudden loss of shear strength in saturated sandy material, resulting ground failure. Areas of Sonoma County most at risk of liquefaction are along San Pablo Bay and in alluvial valleys. There is a very low to moderate potential for liquefaction at the project site. The bridge has been designed to meet Caltrans Seismic Design Code 2.0, which requires the investigation of liquefaction potential at the site. The bridge design has been analyzed and designed to minimize the risk of adverse effects to the structure due to liquefaction. Mapping the project area on the California Department of Conservation Alquist-Priolo fault map showed the project area was not in locations prone to liquefaction. (37)

Significance Level:

Less than Significant Impact

iv. Landslides?

Comment:
The Austin Creek watershed is an area that is susceptible to landslides. The project site has a low rating for landslide susceptibility in the Sonoma County Hazard Mitigation Plan. The project has been designed with foundations drilled deep into underlying rock. The project would therefore not expose people to substantial risk of injury from landslides. Mapping the project area on the California Department of Conservation

Significance Level:

Less than Significant Impact

b) Result in substantial soil erosion or the loss of topsoil?

The soils at the project site are typically found in river valleys. Upland soil composites on the steep, uneven terrain in the project area could be prone to sliding if not protected with retaining walls. Grading work for the new road alignment include engineered retaining walls and drainage features that would prevent soil erosion and any exposed soils as a result of construction activities will be stabilized post-construction.

Significance Level:

Less than Significant Impact

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Comment:
The project site is subject to seismic shaking as described in item *7 a. ii. Strong Seismic Ground Shaking* above. No further mitigation is required. However, the design of the bridge structure will follow the Caltrans Seismic Design Criteria.

Significance Level:

Less than Significant Impact

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Comment:
Table 18-1-B of the Uniform Building Code is an index of the relative expansive characteristics of soil as determined through laboratory testing. The project site is underlain by Riverwash (RnA) soils. The site is not known to have expansive soil conditions or soils with high shrink and swell potential. No substantial risks to life or property would be created from soil expansion at the proposed project (37).

Significance Level:

Less than Significant Impact

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 waste water?

Comment:
The proposed project would not include the addition or removal of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact.

Significance Level:

No Impact

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Comment:
An Archeological Survey Report was prepared for the project by professional archaeologists (AECOM 2022). There are no known paleontological resources on the site, but the project could uncover such materials during construction. Mitigation measure CUL-1 (cultural resources) will mitigate previously unknown resources that are discovered during construction activities. No unique geologic features have been identified in the project action area.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation
CUL-1: Cultural Resources

8. GREENHOUSE GAS EMISSIONS:

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Comment:
The Northern Sonoma County Air Pollution Control District (NSCAPCD) currently does not have adopted Greenhouse Gas (GHG) thresholds of significance for CEQA review projects (NSCAPCD, 2010). Therefore, as the lead agency for the project, SPI has elected to use an approach for the determination of significance of GHG emissions based on the GHG significance thresholds adopted by the BAAQMD. While BAAQMD does not have any adopted GHG thresholds for construction-related emissions, their GHG operational threshold of significance is 1,100 metric tons MT) of CO2e/yr. (BAAQMD Air Quality CEQA Thresholds of Significance - Table 2-1).

GHG contributions of this magnitude are not anticipated with the proposed replacement of the King Ridge Road Bridge because the project would not generate new traffic and traffic volumes are expected to be similar to the existing traffic volumes on King Ridge Road.

It is expected that the replacement of the existing bridge would generate the same baseline GHG emission levels due to its remote location.

King Ridge Road would continue to operate as a "Local Road" with an A-Level-of-Service (LOS), as specified in the Sonoma County General Plan 2020 Circulation and Transit Element. The estimated total Average Daily Trips (ADTs) volume 400 along King Ridge Road is not expected to change as a result of the proposed project. Consequently, the proposed bridge replacement would operate at current GHG emission levels associated with the existing bridge. Based on these assumptions a less than significant impact to GHGs is anticipated with the operational phase of the proposed bridge replacement.

The construction phase of the proposed project is not subject to thresholds of significance. Nevertheless, BMPs are applied by SPI during the construction phase to assist in lowering GHGs pursuant to AB 32 GHG reduction goals and ensure that construction-related GHG emissions are minimized to the extent feasible. These construction phase BMPs include:

- Restricting the idling time for all construction vehicles
- Limiting construction times to Monday through Friday, from 7 AM to 7PM

Overall, the proposed project would not result in a cumulatively considerable contribution of GHG emissions or a cumulatively significant impact to global climate change. (1, 4, 5, 21)

Significance Level:

Less than Significant Impact

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Comment:
The County does not have an adopted Climate Action Plan but has established GHG reduction goals. The project, by implementing current county codes would be consistent with local or state plans, policies, or regulations adopted for the purpose of reducing emissions of greenhouse gases.

Significance Level:

No Impact

9. 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?

Comment:
Construction of the proposed project would require use of fuels and other hazardous materials. Improper storage or handling of these materials could result in spills. Mitigation measures BIO-2 (Prevent Accidental Spills and Pollution), and HAZ-1 (Storage of Hazardous Materials) will reduce severity in the event of accidental spills. Potential impacts from spills into the creek can be reduced to a less-than-significant level by requiring standard approved construction methods for handling hazardous materials.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

HAZ-1- Storage of Hazardous Materials

The construction contract shall require that any storage of hazardous materials follow all applicable local, state, and federal laws for the protection of surface waters. In the event of a spill of hazardous materials the contractor shall immediately call the emergency number 9-1-1 to report the spill and shall take appropriate actions to contain the spill to prevent further migration of the hazardous materials to stormwater drains or surface waters. Spill cleanup kits will be kept onsite.

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?

Comment:

Replacement of the existing bridge would involve using equipment that has a potential to release hazardous materials near Austin Creek. Without adequate BMPs, accidental spills or falling debris could occur, causing potential contamination of the water body and adverse impacts on terrestrial and aquatic life forms.

Implementation of mitigation measure BIO-2 (accidental spills) and HAZ-1 (Storage of Hazardous materials) would reduce potential impacts to a less-than-significant level.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure BIO-2 (accidental spills) and HAZ-1 (Storage of Hazardous materials)

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Comment:
There are no existing or proposed schools within 0.25 miles of the project site. (1)

Significance Level:

No Impact

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?

Comment:
The project site was not identified on, or in the vicinity of, any parcels on lists compiled by the California Environmental Protection Agency, Regional Water Quality Control Board, California Department of Toxic Substances, and the California Integrated Waste Management Board (CalRecycle). The area immediately surrounding the bridge site is undeveloped grassland, and hazardous materials are unlikely to be present. Therefore, no impact from hazardous materials is anticipated with the implementation of the proposed project.

Significance Level:

No Impact

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Comment:

No public airstrips are located in the vicinity of the proposed project. Therefore, no impacts to public airstrips would occur with the implementation of the proposed project. (1)

Significance Level:

No Impact

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Comment:
The project would not impair implementation of, or physically interfere with the County's adopted emergency operations plan. There is no separate emergency evacuation plan for the County. However, there is the potential for construction activities to slow emergency response times. Implementation of Mitigation Measure TRANS-2 would reduce potentially significant impacts related to any potential delays to a less-than-significant level.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure TRANS-2

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Comment:
While the project is located in an area of high fire hazard it would not expose people to increased risk from wildland fires beyond existing conditions. It would not construct buildings that would be occupied by people or structures that would be affected by wildland fires. The proposed project consists of replacing an existing bridge and would not increase the vehicle capacity of the bridge. The bridge would be designed to current American Association of State Highway and Transportation Officials Standards to adequately accommodate emergency vehicles. Therefore, no impacts to people or structures from wildland fires are anticipated with the implementation of the proposed project. (1, 13)

Significance Level:

Less than Significant Impact

10. 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?

Comment:
Austin Creek is a tributary of the Russian River. The "Total Maximum Daily Load"

(TMDLs) regulations for pollutants, excluding sediment and temperature, have not been established for this watershed. Sediment impacts in Russian River and its tributaries prompted listing entire Russian River watershed for sediment. The most sensitive beneficial uses supported by the Russian River includes uses associated with the cold-water fishery and municipal and domestic supply.

The project will require construction activities within the banks of Austin Creek. These activities have the potential to violate water quality standards or waste discharge requirements. A 404 Clean Water Act permit from the USACE, 401 Clean Water Act certification from the NCRWQCB, and a 1602 Streambed Alteration Agreement from CDFW will all be obtained prior to project implementation. Typical conditions contained in these permits regulate discharges to Waters of the State, Waters of the U.S., and discharges that may impact fish and wildlife. Mandatory compliance with the conditions set forth by these permits, along with mitigation measures BIO-1 (Erosion and Sediment Control), BIO-2 (Accidental Spills), BIO-3 (Riparian Habitat), BIO-5 (salmonids) BIO-11 (Waters of the US and Waters of the State), HAZ-1 (Storage of Hazardous Materials), HYD-1 (Surface Water), HYD-2 (Storm Water), HYD-3 (Ground Water) contained in this Initial Study, will ensure that water quality standards are not violated.

The project will incorporate post-construction BMPs to retain and treat runoff from new impervious surfaces. Drainage shall be designed to limit post-development soil and other pollutant discharges to pre-development levels in compliance with the Sonoma County's best management practices for construction grading and drainage (1, 42).

*Total Maximum Daily Load – On a broad level, the TMDL process leads to a "pollution budget" designed to restore the health of a polluted body of water. The TMDL process provides a quantitative assessment of water quality problems, contributing sources of pollution, and the pollutant load reductions or control actions needed to restore and protect the beneficial uses of an individual water body impaired from loading of a particular pollutant.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

The County will implement the following mitigation measures during project construction to minimize water quality impacts to Austin Creek**.**

Mitigation Measure HYD-1- Surface Water

- By October 15, the County shall require that all disturbed areas around the permanent and temporary bridge abutments and piers be re-graded to match the surrounding topography. Seed and straw will be placed on disturbed areas

above channel banks, and all other disturbed areas in the project site, with a jute mesh type or equivalent matting placed over the straw and on disturbed banks, installed per the manufacturer's instructions. This matting shall have no plastic in it. Substitution of materials or erosion control methods shall be required prior approval from PRMD and SPI.

- No work will occur in water and no dewatering of the active stream channel will occur during construction.

- The project site shall be inspected following the first heavy rain, during the middle of the rainy season and at the end of the rainy season following construction. During each visit, areas of significant erosion or erosion control device failure shall be noted and appropriate remedial actions taken.

- All stockpiling of construction materials, equipment, and supplies, including storage of chemicals, refueling and maintenance, shall occur outside the creek channel. No equipment shall be washed where wash runoff could enter the creek.

- All refueling and maintenance of equipment, other than stationary equipment, shall occur outside the channel of Austin Creek, top-of-bank to top-of-bank. Receptacles containing fuel, oil, or any other substance that may adversely affect aquatic resources shall be stored outside of the channel. Any hazardous chemical spills shall be cleaned up immediately.

- Equipment and vehicles operated in the project area will be checked daily to prevent leaks of fuels, lubricants or other fluids to the creek.

- To minimize fluid leaks during operation, refueling, and maintenance of stationary equipment, spill control absorbent material shall be in place underneath this equipment at all times to capture potential leaks.

Mitigation Measure HYD-2 Storm Water

- If work is to occur on the roadway and bridge approaches during the period between October 15 to June 15, all drainage inlets within the project limits shall be protected from receiving polluted storm water through the use of filters such as fabrics, gravel bags, straw wattles, or other appropriate BMPs.

- Construction grading and drainage shall be designed and constructed to maintain natural and existing drainage patterns.

Mitigation Measure HYD-3 Groundwater

- Water encountered during construction of the bridge foundations shall be pumped to an upland location where it cannot flow back into water courses or to

storage tanks or trucks for disposal to a permitted upland location (not within the banks of any waterway).

Mitigation Measure HYD-4- Projects disturbing greater than 1 acre (General Construction Permit)

- Construction activities which involve disturbing 1 or more acres of ground, are subject to the requirements of the State Water Resources Control Board (SWRCB) NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). Construction activities include clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement. Applicants of construction projects must file for coverage under the General Construction Permit by submitting a complete Notice of Intent (NOI) package to the SWRCB and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must contain a site map that shows the construction site perimeter; existing and proposed buildings, lots, roadways, and storm water collection and discharge points; general topography both before and after construction; and drainage patterns across the project site. The SWPPP must include the Best Management Practices (BMPs) that the applicant will use to protect the quality of storm water runoff and the placement of those BMPs.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Comment:
The proposed project would involve minimal use of water during and following construction, including for dust control and for watering plants during revegetation. Based on the small disturbance and revegetation areas, the amount of water use would not substantially deplete groundwater supplies. The addition of a very small amount of additional impervious surfaces would not substantially interfere with groundwater recharge. (1, 42)

Significance Level:

Less than Significant Impact

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

i. would result in substantial erosion or siltation on- or off-site?

Comment:

It is not anticipated that the proposed project would cause a substantial change to the erosion and accretion patterns. The drainage patterns in the project area will be slightly altered by widening the impermeable roadway surfaces, but the changes

should not cause substantial erosion. The potential for significant erosion and sedimentation from the project stems from the removal of vegetative cover and ground disturbance associated with construction. With the incorporation of mitigation measure BIO-1 (Erosion and Sediment Control), a less-than-significant impact from erosion is anticipated. (1, 41)

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

Comment:
The rate and amount of surface runoff on the road and bridge will not change. Re-grading of the roadway to allow construction of the temporary crossing would be stabilized using erosion control BMPs and would not result in a loss of area or linear feet of drainage. (1, 10, 44, 45)

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

Comment:
The area surrounding the project site is comprised of steep hillsides, where drainages flow into Austin Creek. Flows are intermittent. Several small, very rocky, unnamed ephemeral drainages flow down the steep sloped hillsides above the bridge. These waters are intercepted by a roadside ditches with drainage outlets under the existing bridge. These drainages will be improved and some rerouted within the BSA, however the discharge area are largely unchanged in location. (1, 42, 46, 47)

Comment:
The topography at the site consists of the generally north-south meandering river valley and the steep slopes on either side of the channel. In the watershed, the Upper Austin Creek and Bearpen Creek have confined higher slope channels that transport sediment to the downstream areas where it deposits in lower slope areas. Above the channel, where the bridge, road, and local rural residences are located, is lower to mid- slope geology. The Proposed project will not contribute to runoff to exceeds the capacity of the drainage, widening the roadway approaches and bridge is not expected to create a substantial additional source of polluted runoff. (1, 42, 45, 46)

iv. Impede or redirect flood flows?

Comment:
The bridge has been designed so that the structure does not impede or redirect flood flows within Austin Creek. A Location Hydraulic study has been completed for the proposed project, where hydraulic analyses were performed for the existing and proposed conditions using the U.S. Army Corps of Engineers Hydrologic Engineering Centers River Analysis (HEC-RAS) modeling software. The proposed

construction design would result in a slight decrease in the water surface elevation (WSE). The proposed new bridge and existing structure would meet the criteria to pass the 100-year storm flows with adequate freeboard (min. 1 ft.).

(1, 10, 44, 45)

Significance Level:

Less than Significant Impact

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Comment:
The project site is not located in an area subject to seiche or tsunami. The drainage patterns for runoff in the project area will be slightly altered as a result of channel grading activities, but these changes will not increase surface runoff or cause flooding. Flooding has not occurred at the project site even after large storm events, and the minor alteration of drainage patterns associated with the proposed project will not add to the frequency of flooding at the project site. (1, 10)

Significance Level:

No Impact

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Comment:
The larger, wider new bridge structure and roadway approaches would increase the amount of impervious surface in the project area. The additional surface area would result in a slight, but less-than-significant, increase in storm water runoff and the potential for polluted runoff (e.g., lubricants). Roadway and bridge deck drainage for this project would be diverted away from the approach fills and directly into designed and natural drainage swales. Once the water is within the sediment treatment facilities per the project NPDES requirements, it is expected to infiltrate into the ground following typical rainfall events. Resource protection measures BIO-1, BIO-2, BIO-3, HYD-1, HYD-2, HYD-3 will be incorporated into the construction contract specifications for project construction to ensure this potential impact to a less-than-significant level. (1, 42)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

BIO-1, BIO-2, BIO-3, HYD-1, HYD-2, HYD-3

11. LAND USE AND PLANNING:

Would the project:

a) Physically divide an established community?

Comment:
The project would not divide a community, because it would only replace an existing bridge. The existing single lane bridge would be left in place to maintain traffic during construction, and then closed to traffic after the new bridge is completed and opened to traffic. Therefore, no impact from dividing an established community would occur with the implementation of the proposed project. (1)

Significance Level:

No Impact

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?

Comment:
Section 65402 of the California Government Code of Regulations requires that public and private projects be reviewed for conformity with the applicable County General Plan. The Comprehensive Planning Division of the Sonoma County Permit and Resource Management Department has reviewed the proposed project and found it to be consistent with the Sonoma County General Plan.

The project would not conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating an environmental effect, including in the Sonoma County General Plan and zoning ordinance. (1, 7)

Significance Level:

Less than Significant Impact

12. MINERAL RESOURCES:

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Comment:

The project site is not located within a known mineral resource deposit area (Sonoma County Aggregate Resources Management Plan, as amended 2010). Sonoma County has adopted the Aggregate Resources Management Plan that identifies aggregate resources of statewide or regional significance (areas classified as MRZ-2 by the State Geologist). Consult California Geologic Survey Special Report 205, Update of Mineral Land Classification: Aggregate Materials in the North San Francisco Bay Production-consumption region, Sonoma, Napa, Marin, and Southwestern Solano Counties, California (California Geological Survey, 2013). (1, 7)

Significance Level:

No Impact

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?

Comment:
The project site is not located within an area of locally-important mineral resource recovery site and the site is not zoned MR (Mineral Resources) (Sonoma County Aggregate Resources Management Plan, as amended 2010 and Sonoma County Zoning Code). No locally-important mineral resources are known to occur at the site. (1, 7)

Significance Level:

No Impact

13. NOISE:

Would the project:

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?

Comment:

The Noise Element of the Sonoma County General Plan establishes goals, objectives and policies including performance standards to regulate noise affecting residential and other sensitive receptors. The general plan sets separate standards for transportation noise and for noise from non-transportation land uses.

The closest receptor are the three local residences at 162, 240, and 310 feet from north to south respectively. Construction will occur during daytime hours (7am-7pm)

only. The project construction noise will cease at the completion of the project and would not expose receptors to on-going noise that would require attenuation.

The project will not increase transportation noise at the site, because the project will not generate a permanent increase in traffic volumes or shift travel lanes closer to any sensitive noise receptors. (1)

Significance Level:

Less than Significant Impact

b) Generation of excessive groundborne vibration or groundborne noise levels?

Comment:

The project includes construction activities that may generate minor ground borne vibration and noise. These levels would not be significant because they would be short-term and temporary and would be limited to daytime hours. There are no other activities or uses associated with the project that would expose persons to or generate excessive ground borne vibration or ground borne noise levels. (1)

Significance Level:

Less than Significant Impact

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?

Comment:

The site is not within an airport land use plan as designated by Sonoma County. The project would not result in a permanent increase in ambient noise levels, because it would not increase traffic, nor shift travel lanes closer to any sensitive receptors. (1, 7)

Significance Level:

No Impact

14. POPULATION AND HOUSING:

Would the project:

a) **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Comment:
The project would have no direct or indirect effect on population. It would consist of replacing an existing bridge without any housing or growth inducing development. Nor would the project new access to undeveloped areas. There are no new permanent employment opportunities associated with the project. Therefore, no impacts to population growth, housing or road extensions would occur. (1)

Significance Level:

No Impact

b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?

Comment:
No housing would be displaced by the project. Therefore, no impacts caused by displacing existing housing or the need to construct new housing would occur. (1)

Significance Level:

No Impact

15. PUBLIC SERVICES:

Would the project:

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

Comment:
Construction of the project would not involve substantial adverse physical impacts associated with provision of public facilities or services and the impact would be less than significant. (1, 7)

Significance Level:

Less than Significant Impact

i. Fire protection?

Comment:
North Sonoma County Fire District would continue to serve this area with implementation of the project. There would be no increased need for fire protection resulting from the replacement of the existing bridge and the project would not require the provision of new or physically altered police protection facilities. The temporary crossing will be available for emergency responders during project construction. However, there is the potential for construction activities to slow emergency response times. Implementation of Mitigation Measure TRANS-2 would reduce potentially significant impacts related to any potential delays to a less-than-significant level. (1, 42)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure TRANS-2

ii. Police?

Comment:
The Sonoma County Sheriff will continue to serve this area. There will be no increased need for police protection resulting from the project. No housing or jobs are included as a part of this project. (1)

Significance Level:

No Impact

iii. Schools?

Comment:
Replacement of the bridge would not increase the capacity of King Ridge Road, nor would it increase the surrounding population. As such, no impacts would result from project implementation related to increased demands for schools, parks, or other public facilities. (1)

Significance Level:

No Impact

iv. Parks?

Comment:

No parks will be impacted by the project. (1)

Significance Level:

No Impact

v. Other public facilities?

Comment:
There are no other public facilities near or in the vicinity of the project that will be impacted by the project. (1)

Significance Level:

No Impact

16. 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?

Comment:
Replacement of the bridge would not increase the capacity on King Ridge Road, nor would it increase the surrounding population resulting in an increased demand for public recreation facilities. The proposed project would not involve activities that would cause or accelerate substantial physical deterioration of parks or recreational facilities. The project will have no impact on the use of existing neighborhood and regional parks or other recreational facilities. (1, 7)

Significance Level:

No Impact

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?

Comment:
The proposed project does not involve construction of recreational facilities. See item 16.a. above. (1)

Significance Level:

No Impact

17. TRANSPORTATION:

Would the project:

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Comment:
King Ridge Road is a local rural road in Sonoma County located north of the City of Cazadero. The portion of King Ridge Road in the project area is rural and narrow, consisting of two travel-lanes with minimal shoulders. The road traverses Austin Creek, a tributary to the Russian River four miles north of the intersection with Fort Ross Road and Cazadero Highway. It is the only route available to residents and facilities north of the bridge without have to travel west to the coast then south down Highway 1 to Bodega Bay. Average daily traffic on King Ridge Road is 400 vehicles per day (County of Sonoma, 2021). King Ridge Road is designated a bikeway in the Sonoma County Bicycle and Pedestrian Plan (2010), and bicyclist/pedestrian use is limited. There is no transit service.

The existing bridge will remain open to traffic during the construction of the new bridge. The new road alignments to the new bridge will be constructed prior their connection to King Ridge Road, resulting in minimal road closer time. Traffic signage will be posted before the road to new bridge connection so residents can take necessary actions.

(1, 42)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation Measure TRANS-1- Notification of Closure

- The County shall notify property owners along King Ridge Road at least 7 days in advance of the proposed temporary closure.
- Signage shall be placed at both ends of King Ridge Road notifying motorists of the planned closure.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

Comment:
CEQA Guidelines Section 15064.3, subdivision (b) states that for transportation

projects that have no impact on vehicle miles traveled (VMT) should be presumed to cause less than significant transportation impact. Replacement of an existing bridge will not increase roadway capacity and will no induce population growth in the project area. No increase to operational VMT would occur with project implementation; therefore, the impact is less than significant. (1, 42)

Significance Level:

Less than Significant Impact

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

Comment:

The existing single span bridge has one land of traffic and no shoulders. The road configuration on the north side has a moderate bend when entering or exiting the bridge. The new bridge will consist of two travel lanes, each having an outside shoulder. The approaches to the new bridge will straighten King Ridge Road from its existing configuration. The project will not result in any hazardous geometric design features. The project is not expected to change the current use of the bridge for residential and agricultural related travel.

Significance Level:

Less than Significant Impact

d) Result in inadequate emergency access?

Comment:
The Northern Sonoma County Fire Protection District (NSCFPD) provides fire and emergency response in the vicinity. The closest station is the Cazadero Fire Department, approximately 9 miles south and 12 minutes travel time (without lights and sirens). The NSCFPD uses the King Ridge Road Bridge when responding to incidents north and west of the bridge.

The Sonoma County Sheriff's Department provides police response in the area. Ambulance service is provided by Coastal Valleys EMS Agency operating out of 436 Aviation Boulevard, in Santa Rosa, California. Construction activities may result in traffic delays as there are no available detours. This is a short-term construction related impact that will cease upon project completion.

There would be no impact to traffic during the new bridge construction since the existing bridge would remain open to traffic. The contractor will require access below the existing bridge to assist with demolition and will provide a graded work pad in the dry creek bed to facilitate construction vehicle movement. This work would involve excavators and back hoes grading the bank entry. This work would be conducted in

the second year of construction and take several weeks to complete. This work would not impact emergency responses since the new road alignment would be completed to cross the new bridge. King Ridge Road is a very rural route, and no alternate detour routes are available. King Ridge Road continues northwest of the bridge crossing and terminates with Hauer Bridge Road and Tin Barn Road just several miles short of the coast. Emergency access will not be interrupted during the entirety of the project.

Significance Level:

Less than Significant

Mitigation

Mitigation Measure TRANS-2 - Emergency Access

Emergency response organizations will be notified of the project construction schedule and any closure in advance. The County will require the contractor to provide passage of emergency vehicles through the project site at all times. The Contractor shall make plans for emergency vehicle staging on the easterly approach if complete closure is determined necessary at any point in the construction schedule.

e) Result in inadequate parking capacity?

Comment:

There is only parking on the road shoulder, and this will not change due to the project. During construction activities parking at the site may not be available but would be just slightly down the road. (1)

Significance Level:

No Impact

18. TRIBAL CULTURAL RESOURCES:

Would the project:

a) 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:

i) 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 5030.1(k), or

Comment:
Based on results of the Archeological Report for the King Ridge Road Bridge (AECOM 2022) there were no known tribal cultural resources on the site. Additionally, per AB-52 requirements, local tribes specified by the Native American Heritage Commission were notified of the project. No requests for consultation were received by the County.

The project has potential to uncover previously unknown resources during construction. Mitigation Measure CUL-1 would reduce this potentially significant impact to a less-than-significant level. (1, 34, 36)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:
Mitigation Measure CUL-1: Cultural Resources, CUL-2: Human Remains

ii) A resource determined by the lead agency. In its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Comment:
There are no known tribal cultural resources on the site. See 18.a. above. (1, 34, 36)

Significance Level
Less than Significant with Mitigation Incorporated

Mitigation:
Mitigation Measure CUL-1: Cultural Resources, CUL-2: Human Remains
L,klk

19. 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?

Comment:
The project would not generate any septic effluent or wastewater discharge to contribute to the need for construction of water treatment facilities. The project will not require the construction of wastewater treatment facilities or expansion of existing facilities. The site will be graded to match adjacent slopes to ensure proper storm water drainage. Storm water drainage will adhere to conditions of project permits in compliance with the Clean Water Act and CA Department of Fish and Wildlife. Therefore, no impacts resulting from exceeding wastewater treatment standards would occur. (1)

Significance Level:

No Impact

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Comment:

The proposed project would not include any buildings or structures requiring new or expanded water supplies. Therefore, impacts would be less than significant. (1)

Significance Level:

No Impact

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?

Comment:

The project would not generate any wastewater discharge. Therefore, no impacts relating to wastewater treatment facility's capacity would occur. (1)

Significance Level:

No Impact

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?

Comment:

Disposal of the waste that would result from the temporary construction phase of the proposed project would not exceed state or local standards. Therefore, impacts would be less than significant. (1)

Significance Level:

Less than Significant Impact

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Comment:
Sonoma County has access to adequate permitted landfill capacity to serve the proposed project. Sonoma County has a solid waste management program in place that provides solid waste collection and disposal services for the entire County. The program can accommodate the permitted collection and disposal of the waste that would result from the temporary construction phase of the proposed project. Therefore, impacts would be less than significant. (1)

Significance Level:

Less than Significant Impact

20. WILDFIRE

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

The project splits Local Responsibility Area and State responsibility area, and is land classified as a very high fire severity zone upstream of the bridge. (1, 7)

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The project will not impair emergency response. The structure has been designed to better accommodate large vehicles. This will enhance the ability to evacuate the area in the event of emergency.

Emergency response access will be mitigated to less than significant with mitigations incorporated. See 17(d). TRANS-2 (Emergency Assess) (1, 7, 42)

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?

The project is located in a very high Fire Hazard Severity Zone. Conditions in the surrounding area will remain unchanged compared to existing. The project will not expose occupants to wildfire. (1)

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 of that may result in temporary or ongoing impacts to the environment?

The roadway alignment will change to an upstream alignment from the existing bridge. The new section of roadway will require less short-term maintenance compared to the existing infrastructure. This change will not exacerbate fire risk at the project site nor in the surrounding areas. (1)

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?

The project will not expose people to significant risk. The project will include retaining walls to support surrounding land slopes and improved irrigation and drainage that will reduce pollution into the creek from road surface debris.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

TRANS-2 (Emergency Assess)

21. MANDATORY FINDINGS OF SIGNIFICANCE

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?

The incorporation of the mitigation measures included in Section 4 (Biological Resources) would reduce potential impacts to fish, wildlife, plants, to a less-than-significant level.

The project site does not contain any object, building, structure, site, area, place, record, or manuscript that a lead agency determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. However, cultural resources could potentially be uncovered during construction. Mitigation measures included in Section 5 (Cultural Resources and Human Remains) would reduce potential impacts to a less-than-significant level.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Section 4 (Biological Resources); Section 5 (Cultural Resources and Human Remains)

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)?

Cumulative impacts are impacts on the environment that result from the incremental impacts of a proposed project when added to other past, present, and reasonably foreseeable future actions (State CEQA Guidelines Section 15355[b]). The replacement of the King Ridge Road Bridge River over Austin Creek is not anticipated to intensify development within the area. There are no other similar projects that are planned to take place in the region that could contribute to cumulative impacts. Given that the proposed project's potentially significant impacts can also be completely mitigated, any potential cumulative impacts would be less than significant and the project's contribution to cumulative impacts would not be cumulatively considerable.

Significance Level:

Less than Significant Impact

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The proposed bridge replacement would reduce the safety hazards associated the existing bridge crossing Austin Creek, which has a low seismic sufficiency rating and been determined to be functionally obsolete. Because the proposed project represents a net decrease in environmental effects that could adversely impact human beings, either directly or indirectly, project impacts to human beings would be less than significant.

Significance Level:

Less than Significant Impact

References

1. Sonoma County Resource Conservation Department. 2022. Sonoma RCD: Annual Report 2021-2022. 26 pages. https://issuu.com/sonomarcd/docs/srcd_annualreport2021-22.

2. U.S. Department of Agriculture. 1972. Soil Survey of Sonoma County, California, Sonoma County, https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/sonomaCA1972/sonomaCA1972.pdf.

3. Sonoma County Important Farmland Map 2018. California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program (https://maps.conservation.ca.gov/DLRP/CIFF/).

4. Northern Sonoma County Air Pollution District (NoSoCo AIR). 2010. Air Monitoring Program. https://nosocoair.org/air-quality.

5. Caltrans. 2023. King Ridge Road Bridge Natural Environmental Study. 98 pages.

6. Caltrans. Environmental Assessment.

7. Caltrans. 2024. King Ridge Road Bridge Road over Austin Creek Replacement Biological Assessment, Prepared for Caltrans by Sonoma County. 82 pages.

8. National Marine Fisheries Service. Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson–Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the King Ridge Bridge over Austin Creek Replacement (BRLO-5920(146)). WCRO-2024-01380. 62 pages.

9. U.S. Fish and Wildlife Service. 2024. Informal Consultation for the king Ridge Road Bridge Replacement Project in Cazadero, Sonoma County, California (Caltrans BRLO-5920 (146)). 2024-0003326. 6 pages.

10. Permit and Resources Management Department (PRMD), Sonoma County General Plan 2020 (as amended), September 23, 2008.

11. April 14, 2006. Stream Inventory Report, Big Austin Creek. 730 pages.

12. California Natural Diversity Database (CNDDB). 2022a. records for the Cazadero USGS 7.5’ Quadrangle. https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data

13. California Native Plant Society (CNPS). 2007. Inventory of Rare and Endangered Plants (online edition, v7-07a). California Native Plant Society. Sacramento, CA. Accessed on January 16, 2018, from http://www.cnps.org/inventory.

14. California Natural Diversity Database, California Department of Fish & Game. https://wildlife.ca.gov/Data/CNDDB.

15. California Department of Fish and Game. 2008. California Aquatic Invasive Species Management Plan. 153 pages.

16. USFWS. 1990. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Northern Spotted Owl.; Federal Register 55 FR 26114-26194.

17. California Department of Fish and Game. 2008. California Aquatic Invasive Species Management Plan. 153 pages.

18. California Herps. 2018. *Rana boylii* - foothill yellow-legged frog. http://www.californiaherps.com/frogs/pages/r.boylii.html (accessed May 7, 2021).

19. Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. 3rd Edition. Houghton Mifflin Harcourt, New York, New York, USA.

20. Jennings and Hayes, 1994 western pond turtle: Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Department of Fish and Game, Inland Fisheries Division.

21. U.S. Fish and Wildlife Service. 2010. 75 FR 12816. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for the California Red-legged Frog. Fish and Wildlife Service. Final Rule. United States Fish and Wildlife Service, Department of the Interior. Federal Register vol. 75 pages 12816-12959.

22. AmphibiaWeb: https://amphibiaweb.org.red bellied newt

23. Hays, D. W., K. R. McAllister, S. A. Richardson, and D. W. Stinson. 1999. Washington state recovery plan for the western pond turtle. Washington Department of Fish and Wildlife.

24. NMFS. 2020. Magnuson–Stevens Fishery Conservation and Management Act Essential Fish Response for the King Ridge Bridge over Austin Creek Replacement (BRLO-5920(146)). WCRO-2024-01380. 62 pages.

26. NMFS, 70 FR 37159: Endangered and Threatened Species: Final Listing Determinations for 16 ESUs of West Coast Salmon, and Final 4(d) Protective Regulations for Threatened Salmonid ESUs; Final Rule. Federal Register 70:37160-37204. June 28, 2005.

27. Flosi, G., Downie, S., Hopelain, J., Bird, M., Coey, R., and Collins, B. 1998. *California Salmonid Stream Habitat Restoration Manual*, 3rd edition. California Department of Fish and Game, Sacramento, California.

28. NMFS, 64 FR 179: Endangered and Threatened Species: Threatened Status for Two Chinook Salmon Evolutionary Significant Units (ESUs) in California; Final Rule. Notice of Determination. 64:50394-50415.

29. American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices, Pruning (ANSI A300 (Part 1)-2008 Pruning), American National Standard Institute (ANSI) and National Arborist Association (NAA), 2008;

30. Best Management Practices: Tree Pruning, International Society of Arboriculture (ISA), 2008.

31. Valley Oak Protection Ordinance, County Code Section 26-67; Sonoma County, December 1996.

32. Heritage or Landmark Tree Ordinance, County Code Chapter 26D; Sonoma County.

33. General Plan Environmental Impact Report, Sonoma County Permit & Resource Management Department. http://www.sonoma-county.org/prmd/gp2020/gp2020eir/index.htm

34. AECOM. June 2022. Archeological Survey Report for King Ridge Road Bridge Replacement Project, Unincorporated Sonoma County, California. Prepared for Caltrans. Federal Aid Project NO. BRLO-5920(146). 70 pages.

35. Alquist-Priolo Special Studies Zones; State of California; 1983. http://www.conservation.ca.gov/cgs/rghm/ap/Pages/official_release.aspx

36. Flood Insurance Rate Maps, Federal Emergency Management Agency https://msc.fema.gov/portal

37. Special Report 120, California Division of Mines and Geology; 1980. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_120/SR_120_Text.pdf

38. Standard Specifications, State of California Department of Transportation, available online: http://www.dot.ca.gov/hq/esc/oe/specs_html

39. Manual of Standards for Erosion and Sediment Control Measures, Association of Bay Area Governments; May, 1995.

40. Soil Survey of Sonoma County, California, Sonoma County, U.S. Department of Agriculture; 1972. https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/sonomaCA1972/sonomaCA1972.pdf

41. Evaluation of Groundwater Resources, California Department of Water Resources Bulletin 118; 2003. http://water.ca.gov/groundwater/bulletin118/publications.cfm

42. Sonoma County Congestion Management Program, Sonoma County Transportation Authority; December 18, 1995.

43. Sonoma County Aggregate Resources Management Plan and Program EIR, 1994.

44. Sonoma County Bikeways Plan, Sonoma County Permit and Resource Management Department, August 24, 2010.

45. Sonoma County Permit and Resource Management Department and Department of Transportation and Public Works Traffic Guidelines, 2014

46. Sonoma County Permit and Resource Management Department, Visual Assessment Guidelines, (no date)

47. Sonoma County Permit and Resource Management Department Noise Guidelines, 2017

48. Sonoma County Water Agency, Sonoma Valley Groundwater Management Plan, 2007 and annual reports. http://www.scwa.ca.gov/svgw-documents/

49. Sonoma County Water Agency, Santa Rosa Plain Groundwater Management Plan, 2014. http://www.water.ca.gov/groundwater/docs/GWMP/NC-5_SRP_SonomaCoWaterAgency_GWMP_2014.pdf

50. Sonoma County Department of Transportation and Public Works. Exhibit 6-Preliminary Environmental Study (PES) Form 2010

51. Visual Impact Assessment, Minor Level, Prepared for Caltrans by Sonoma County PRMD, 2011.

52. Natural Environment Study, Prepared for Caltrans by Sonoma County PRMD, 2023.

53. Water Quality Assessment Memo, Prepared for Caltrans by Sonoma County PRMD.

54. Technical Memorandum, Location Hydraulic Study, Moffat & Nichol, 2019.

55. Technical Memorandum - Traffic, Prepared for Caltrans by Sonoma County PRMD.

56. Technical Memorandum - Equipment Staging, Prepared for Caltrans by Sonoma County PRMD.

57. Location Hydraulic Study. Moffat & Nichol, 2019

58. Bridge Design Hydraulic Study Report. Moffat & Nichol. 2019

59. Technical Memorandum – Right of Way, Prepared for Caltrans by Sonoma County PRMD.