Kenmar Road and US 101 Interchange Project

Public Circulation Initial Study & Proposed Mitigated Negative Declaration

City of Fortuna

5 December 2022

Public Circulation IS/ Proposed MND Kenmar Road and US 101 Interchange Project

This document has been prepared by:

City of Fortuna
P.O. Box 545
Fortuna, CA 95540

In collaboration with:

GHD
718 Third Street
Eureka, CA 95501

5 December, 2022

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1. Project Information

Project Title	Kenmar Road and US 101 Interchange Project
Lead Agency Name & Address	City of Fortuna 621 11th Street P.O. Box 545 Fortuna, CA 95540
Lead Agency Contact Information for Key Staff	Merritt Perry, City Manager, (707) 725-1410 mperry@ci.fortuna.ca.us Brendan Byrd, Public Works Director (707) 725-1469 bbyrd@ci.fortua.ca.us Liz Shorey, Deputy Director of Community Development, (707) 725-1408 lshorey@ci.fortuna.ca.us
Project Location	Fortuna and Humboldt County, CA
Project Sponsor's Name & Address	City of Fortuna 621 11th Street P.O. Box 545 Fortuna, CA 95540
General Plan Land Use Designation	Agriculture (AG) Commercial (COM) Mill District (MD) Residential Low (RL)
Zoning	FC: Freeway Commercial M2: Heavy Industrial R-1-6: Residential Single Family

1.1 CEQA Requirements

This Project is subject to the requirements of the California Environmental Quality Act (CEQA). The lead agency is the City of Fortuna (City). The purpose of this Initial Study is to provide a basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration. This Initial Study is intended to satisfy the requirements of the California Environmental Quality Act, CEQA, (Public Resources Code, Div 13, § 21000-21177), and the CEQA Guidelines (California Code of Regulations, Title 14, § 15000-15387). CEQA encourages lead agencies and applicants to modify their Projects to avoid significant adverse impacts.

§ 15063(d) of the State CEQA Guidelines states the content requirements of an Initial Study as follows:

1. A description of the Project including the location of the Project;

2. An identification of the environmental setting;
3. An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
4. A discussion of the ways to mitigate the significant effects identified, if any;
5. An examination of whether the Project would be consistent with existing zoning, plans; and other applicable land use controls; and
6. The name of the person or persons who prepared or participated in the Initial Study.

1.2 Purpose

The Kenmar Road and US 101 Interchange Project (Project) would improve traffic operation and safety at a key highway interchange in Fortuna, California. US 101 serves as the primary regional roadway in Humboldt County and is critically important to the residents and economy of Fortuna. The existing intersection controls, roadway geometry, and the high volumes of local and regional traffic on Kenmar Road result in poor traffic operation and safety issues at and near the interchange. Under existing conditions, the Project Area experiences traffic delays during peak hours, experiences crash rates above the statewide average, and lacks bicycle and pedestrian facilities, resulting in a barrier to bicycle and pedestrian circulation. Project goals include:

- Simplify and improve navigation and traffic operations on Kenmar Road between Riverwalk Drive and Eel River Drive, including the Kenmar Road/US 101 interchange;
- Improve operations, reduce congestion, and minimize conflicts at the Kenmar Road intersections;
- Improve safety at Kenmar Road intersections; and
- Improve the local and regional bicycle and pedestrian facilities through the Kenmar Road/US 101 interchange area.

1.3 Implementing Agency

This ISMND assumes the Project would be implemented by the City. However, if the Project is ultimately implemented by Caltrans, the Project Description as described herein would remain. Environmental impact analysis herein would also remain accurate, independent of which of the two agencies oversees construction of the Project. Required mitigation measures as established in this ISMND would not change but would be implemented by Caltrans, in cooperation with the City.

1.4 Proposed Project Summary

The proposed Project would replace the existing intersections of US 101 and Kenmar Road at the interchange with two roundabouts, improving traffic, pedestrian, and bicycle operations (see Figure 1 – Vicinity Map). The Project also includes modifications to the US 101 on-ramps and off-ramps, relocation of the park and ride facility, lane improvements on Kenmar road, and the realignment of Eel River Drive and Riverwalk Drive. The Project may also include traffic signal and lane improvements on the western Kenmar leg of the Ross Hill Road intersection. In addition to the proposed motor vehicle-related roadway safety improvements, the Project includes a segment of Class I bike path through the Project Area in addition to other at-grade pedestrian and bicycle improvements to enhance pedestrian connections and promote regional bicycle network continuity. The Class I bike path would be integrated into the developing Great

Redwood Trail. The Project would simplify and improve navigation and traffic operations on Kenmar Road and Eel River Drive, including the Kenmar Road and US 101 interchange.

The Project is being designed in accordance with the Caltrans *Highway Design Manual, 7th Edition* (2020) and the National Cooperative Highway Research Program (NCHRP) Report 672 entitled "Roundabouts: An Information Guide, 2nd Edition". In addition, the Project would be designed in accordance with other specific applicable standards, including the *California Manual on Uniform Traffic Control Devices* (Caltrans 2021); the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design; and portions of the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Streets, 7th Edition* (2018).

The Project is being designed to accommodate the expected volume and diversity of users, and mobility modes. The Project includes pavement reconstruction, a paved shared use path, sidewalks/walkways and curb ramps, crosswalks, roundabouts, lighting, landscaping, signage, retaining walls, and stormwater drain facilities, utility adjustments/relocations and other ancillary infrastructure improvements. Particular constraints within the Project alignment and locations for compensatory mitigation may warrant adjustments to the standards to address site specific issues.

1.5 Project Location

The Project Area is located approximately 1,000 feet east of the Eel River near the southwestern corner of the City of Fortuna. The Project Area is approximately 16 acres in size and is primarily comprised of existing Caltrans, City of Fortuna, and County of Humboldt right-of-way (Figure 2 – Project Overview).

West of the US 101 right-of-way, the Project is located largely within the existing City of Fortuna right-of-way that contains Riverwalk Drive. The Project would include small areas of encroachment into portions of APN 201-152-013 (agricultural field); APN 201-152-015 (an existing 87-space RV park) would be temporarily or permanently occupied by the realigned roadway, and other parcels in the vicinity.

East of the US 101 right-of-way, the Project is located within City, County, Caltrans, and railroad right-of-way. The Project would include an area of encroachment into APN 202-022-001 in order to accommodate the proposed shared use path and the driveway conform to the parcel.

The Project Area also includes a non-operational railroad corridor and anadromous Mill Creek, which crosses under Kenmar Road. The Project Area is located partially within the city limits of Fortuna and partially within unincorporated Humboldt County. Portions of the Project Area are located in the Coastal Zone, including Riverwalk Drive and both southbound and northbound lanes of US 101 to the south of the interchange (Humboldt County, 2022g). Of the portions of the Project Area located within the Coastal Zone, all Project activities are located within the jurisdiction of the Humboldt County Local Coastal Program (Eel River Area Plan). No portions are located within the State retained Coastal Zone jurisdiction.

1.6 Surrounding Land Uses and Existing Setting

The general setting for the surrounding area can be characterized as rural residential to the north and east, and landscapes intermixed with grazing and agricultural lands to the south and west. Urban development is concentrated in the northern portion of the surrounding area and along US 101.

1.7 Project Description

Roadway Paving

The existing roadway, including ramps, would be improved using a variable thickness overlay, or by replacing the existing structural pavement section with new aggregate base and hot mix asphalt pavement. Excavation would extend into the native subgrade where required to remediate poor soil/subgrade conditions, in order to accommodate any widening/realignments, or changes in the roadway profiles. Any material that cannot be recycled onsite for the Project would be removed and hauled off-site for recycling or legal disposal by the contractor. Project elements necessary for construction are summarized below and shown in Figure 2 – Project Overview.

Striping and Signage

The repaved segments would include required striping, pavement markings, and signage in order to comply with California Manual on Uniform Traffic Control Devices (CA MUTCD) requirements. Existing regulatory, advisory, and guide signage would be upgraded and replaced to reflect new traffic flow patterns resulting from the roundabouts and other improvements.

US 101 Ramps

The existing northbound and southbound off-ramps and on-ramps would be realigned to support the new roundabout configuration proposed for both sides of US 101. In the southbound direction, the off-ramp alignment would shift approximately 60 feet to the west toward the RV park. The southbound on-ramp would also shift approximately 50 feet to the west. In the northbound direction, the off-ramp would shift approximately 60 feet to the east, while the. northbound on-ramp would shift approximately 70 feet to the east (Figure 2 – Project Overview).

Roundabouts, and Approaches on Kenmar Road

A new roundabout is proposed for each side of US 101 (two new roundabouts in total) to improve traffic operations and safety (Figure 2 – Project Overview). Excavation to accommodate the roundabout and roadway approaches is expected to be approximately 2 to 4 feet, although some isolated deeper excavations may be required to remediate poor soil/subgrade conditions, or to accommodate the installation of underground utilities and structure foundations.

Concrete improvements associated with the roundabout include the roundabout aprons, splitter islands, shared use paths, sidewalks/walkways/paths, and curbs. The truck aprons would include integral color to provide contrast from the other concrete features while avoiding a stark visual alteration. The roundabout center island and splitter islands would be landscaped or hardscaped and designed to blend into the existing community aesthetic and character.

Both travel lanes of Kenmar Road on either side of US 101 would be realigned and widened as necessary to support the new roundabouts.

The Project would include five new roundabout splitter islands in the following locations:

– West of the southbound ramp roundabout on Riverwalk Drive, in front of the RV park
– Between the two roundabouts on Kenmar Road, under US 101
– East of the northbound ramp roundabout on Kenmar Road between east- and west-bound travel lanes, and between the westbound lane and northbound ramp turn lane

– On Eel River Drive, near the Park and Ride

Splitter islands would include pedestrian refuge islands and provide connectivity with new crosswalks (Figure 2 – Project Overview)

Park and Ride

The existing Park and Ride would be relocated, reconfigured, and reconstructed. The overall footprint of the facility would be similar in size to the existing footprint. As a result of contemporary Caltrans design standards for parking and striping, the number of spaces would reduce from the existing 18 spaces to 15 spaces, including two ADA accessible parking stalls. However, three additional parallel parking stalls that would be installed on Eel River Drive would bring the total parking stalls back to 18. Crosswalks would extend from the Park and Ride across both Eel River Drive and Kenmar Road (Figure 2 – Project Overview). The Park and Ride could accommodate a public bus stop in the future. A shared use path and vegetated buffer would separate the Park and Ride from Kenmar Road and Eel River Drive.

Ross Hill Road Intersection Improvements

To prevent eastbound traffic from backing up into the roundabout and in support of other operational improvements, the Project may also include traffic signal and lane improvements on the western Kenmar leg of the Ross Hill Road intersection.

Retaining Wall

Beneath the overpass, a retaining wall (RW #1) would be constructed on the north side of Kenmar Road beneath the US 101 bridge to accommodate the entire width of the shared use path. A second retaining wall (RW #2) would be constructed on the south side of Kenmar Road just west of the US 101 undercrossing. A third retaining wall (RW #3) would be constructed along the northbound side of Eel River Drive, which would span the length of the Fortuna Park and Ride lot. Retaining walls #1 and #2 are anticipated to be combination of ground anchored and soil nail walls. Retaining wall #3 may differ slightly in the structure as it would be retaining a natural hillside rather than a highway bridge embankment. Retaining wall #3 is expected to consist of either a soil nail retaining wall or a cantilevered soldier pile wall. Further site assessments need to take place to determine the preferred construction and placement of the walls. All retaining walls would be colorized and texturized to have similar facings to maintain conformity and enhance the visual aesthetic throughout the interchange corridor.

Pedestrian and Bicycle Facilities

New shared use paths, and curb ramps would be constructed on the north side of Kenmar Road, providing improved pedestrian and bicycle safety and enhanced connectivity across US 101. Beneath the highway bridge, a retaining wall would be constructed to accommodate the entire width of the shared use path. Through signing and striping, cyclists may also proceed through the interchange by taking the full traveled way. The new shared use paths would connect to new crosswalks across the US 101 southbound offramp and northbound onramp to allow for future connectivity to planned trail improvements, including the Great Redwood Trail.

Drainage Improvements

The project would include new drainage facilities, including gutters, inlets, pipes, and rock energy dissipaters. Existing watershed drainage patterns would be maintained to the maximum extent practicable.

Modification or alteration of the Mill Creek box culvert under Kenmar Road would not occur. Excavation depths to install drainage facilities may vary but would typically be limited to 6 feet below existing grade.

Utilities

The following is a preliminary list of utilities within the construction limits:

– Natural Gas
– Overhead and Underground Electric
– Overhead and Underground Communications
– Potable Water
– Storm Drainage

Constructing the Project would require the relocation of both above and below ground utilities that conflict with planned Project elements.

Vegetation

The two roundabouts would include vegetated or hardscaped medians, splitter islands, and truck aprons, and the Park and Ride would also include vegetation on either side of the sidewalk separating the facility from Eel River Drive and Kenmar Road. In addition, a vegetated buffer strip or concrete barrier would separate the new shared use path from the north side of Kenmar Road. Any vegetation incorporated into the Project is anticipated to include low-maintenance planting designed to blend into the surrounding environment without blocking visibility.

Lighting

The Project would provide enhanced lighting to improve roadway visibility for drivers during nighttime hours. Lighting is anticipated to be installed at ramp merges and diverges along the shoulders of US 101 as well as at conflict points in and out of the roundabout and at pedestrian crossings. Lighting would also be provided at approaches to the intersection to improve visibility of the changing roadway features. Excavation depths would range from approximately 6-10 feet for each light pole.

Lighting would be designed to protect wildlife and nighttime views, including views of the night sky. The Project would be designed to be consistent with the City's and Caltrans design guidelines. To comply with these requirements, lighting for the Project would be directed downward and shielded except in situations where requirements of lighting for construction or traffic safety may take priority. This would ensure lighting is contained within the site and does not cause significant lighting and glare impacts for surrounding land uses.

Off-Site Mitigation

If compensatory mitigation for one-parameter wetlands and other regulated habitats cannot be achieved within the established Project Area, off-site mitigation would occur at suitable locations deemed acceptable to jurisdictional agencies. Off-site mitigation would occur at the following locations as shown in Figure 3:

- In various locations within the southern portion of the former Palco Mill site, along the Mill Creek and Strongs Creek riparian corridor.
- APN 202-051-008, proximal to the Strongs Creek riparian corridor.

Implementation of compensatory mitigation would be limited to planting willows and other native species via hand labor only. Deep excavation beyond 24 inches would not occur, and ground disturbance would be minimal.

1.8 Project Construction

Construction Schedule

The construction is anticipated to begin in 2025 or later and would occur over two construction seasons. If feasible, vegetation clearing outside of the nesting bird season would occur first, by March 15. Construction would require approximately 18 months, commencing in Spring.

Construction Staging, Activities, and Equipment

All construction activities would be accompanied by both temporary and permanent erosion and sediment control implementation. Project construction would include the following activities:

- Clearing and grubbing
- Grading and excavation
- Paving (concrete and asphalt)
- Retaining wall construction
- Utility trenching, relocation, and installation
- RSP installation
- Temporary detour routes and temporary traffic control
- Planting, irrigation, and landscaping installation
- Striping, lighting, and signage installation
- Hauling

Equipment required for construction would include, but is not limited to tracked excavators, backhoes, graders, bulldozers, dump trucks, water trucks, skid steers, concrete truck, drill rigs, concrete pump trucks, changeable message signs, cranes, compactors, and pick-up trucks. It is not anticipated that any temporary utility extensions, such as electric power or water, would be required for construction. Water from legal sources would be used for dust control and compaction and re-vegetation.

Traffic and Access Control

The Project Area would be accessed via Riverwalk Drive, Kenmar Road and US 101. Temporary detours including temporary detour roads would be required throughout construction. Temporary detours would follow City and Caltrans requirements for temporary roadway closures, including signage and public noticing. Construction would be phased in order to maintain local access to US 101.

Establish Exclusion Areas and Erosion Control

Areas identified by biological studies as wetlands or sensitive habitats near the Project Area would be excluded with protective fencing prior to construction. Erosion control BMPs would also be installed prior to construction.

Vegetation Removal

Vegetation removal would include mowing and brush removal. Tree removal may also be required. The ground would also be grubbed to remove roots. The disturbed roadside areas would be restored to pre-construction conditions or stabilized with a combination of grass seed, straw mulch, rolled erosion control fabric, and other plantings/revegetation. If required, revegetation would include replanting and any potential compliance monitoring in support of mitigation required by resource agencies for impacts to regulated habitats, such as wetlands or Sensitive Natural Communities.

Stockpiling and Staging

Temporary disturbance for stockpiling and staging would occur within the limits of temporary disturbance of the Project Area or in approved industrial or paved areas outside the project limits. Within the stockpiling and staging area, Best Management Practices (BMPs) would be utilized to control erosion and prevent sediment and hazardous materials from impacting the environment.

Excess soils, aggregate road base, RSP, and construction materials would be stored within designated stockpiling and staging areas. Excess materials may be re-used onsite for backfill and finished grading. Excess materials would not be stockpiled on-site once the Project is complete. The contractor would haul additional excess materials off site for beneficial re-use, recycling, or legal disposal.

Groundwater Dewatering

Groundwater dewatering is generally not expected to be necessary. However, if needed, temporary groundwater dewatering would involve pumping water out of a trench or excavation. Groundwater would typically be pumped into a settling pond, Baker tanks (or other similar type of settling tank), dewatering bags, or discharged to upland areas. Discharge to the City's stormwater network or Mill Creek would not occur.

1.9 Maintenance and Operation

Following construction, general operation and maintenance activities associated with the proposed Project would be limited to typical roadway maintenance, including annual inspections, trash/debris removal, vegetation management, repaving, and striping, similar to what is occurring under existing conditions.

1.10 Regulatory Permits, CEQA, and NEPA

The City of Fortuna is the CEQA lead agency for the Project. This Initial Study with a Mitigated Negative Declaration is the proposed CEQA pathway. Caltrans is the NEPA lead agency; a Categorical Exclusion is the proposed NEPA pathway.

Project activities in the Coastal Zone would require coverage under a Coastal Development Permit. The Project is located in both the Local and Appeal Zone jurisdiction of the Coastal Zone; thus, the Coastal Development Permit application would be submitted to the Humboldt County Planning Department but subject to appeal by the State.

Temporary and permanent impacts to wetlands would require permits from the U.S. Army Corps of Engineering (USACE) under Section 404 of the Clean Water Act (CWA). A corresponding Water Quality Certification from the North Coast Regional Water Quality Control Board (Region Board) Under Section 401 of the CWA would be required.

The Mill Creek crossing under Kenmar Road would not be modified. Thus, a requirement to obtain a California Department of Fish and Wildlife (CDFW) Streambed Alteration Agreement is not anticipated. Similarly, consultation with CDFW for California Endangered Species Act (CESA) and the National Marine Fishery Service/NOAA Fisheries (NMFS) under the Endangered Species Act would not be required.

1.11 Environmental Protection Actions Incorporated into the Project

The following actions are included as part of the Project to reduce or avoid potential adverse effects that could result from construction or operation of the Project Mitigation measures are presented in the following analysis sections in Chapter 3, Environmental Analysis. Environmental protection actions and mitigation measures, together, would be included in a Mitigation Monitoring and Reporting Program (Appendix B) at the time that the Project is considered for approval.

Environmental Protection Action 1 – Stormwater Pollution Prevention Plan (SWPPP)

The Project will obtain coverage under State Water Resources Control Board (Water Board) Construction General Permit associated with construction. The lead agency for construction will submit permit registration documents (notice of intent, risk assessment, site maps, SWPPP, annual fee, and certifications) to the Water Board. The SWPPP will address pollutant sources, best management practices, and other requirements specified in the Order. The SWPPP will include erosion and sediment control measures, and dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. A Qualified SWPPP Practitioner will oversee implementation of the Project SWPPP, including visual inspections, sampling, and analysis, and ensuring overall compliance.

1.12 Required Agency Approvals

The following permits and approvals are likely to be required prior to construction:

- Caltrans Encroachment Permit
- County of Humboldt Encroachment Permit
- North Coast Regional Water Board (NCRWB, or Regional Board) Clean Water Act Section 401 certification
- Construction stormwater discharge permit (National Pollutant Discharge Elimination System) from the State Water Resources Control Board
- U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permit
- Humboldt County Coastal Development permit

1.13 Tribal Consultation

The City has received requests for notification of proposed Projects from California Native American tribes pursuant to Public Resources Code Section 21080.3.1. Under Assembly Bill (AB) 52, notification letters were sent to the Bear River Band of the Rohnerville Rancheria and the Wiyot Tribe on June 24, 2022. A response was received from the Bear River Band of the Rohnerville Rancheria on July 8, 2022, requesting on-site cultural monitoring during ground disturbing activities within 1,000 feet of recorded resources.

2. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages:

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Liz Shorey — Date

Deputy Director of Community Development

3. Environmental Analysis

3.1 Aesthetics

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?			✓	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			✓	
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view of the site and its surroundings? (Public Views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✓	

Existing Aesthetic Environment

Aesthetic impact assessment is based on the Visual Resource Assessment prepared for the project (Appendix D – Visual Impact Assessment). The visual setting within the Project Area includes existing roads within Caltrans and Humboldt County right-of-way, including US 101, and views of local landmarks and resources from the Project corridor. These areas include Riverwalk RV Park, Eel River, a motel (Best Western Country Inn), the Fortuna Park and Ride, and out of service railroad tracks crossing Kenmar Road. The Project Area is located in a relatively rural setting characterized by the existing roadway corridor bordered by tall trees, open grassy areas, and dense vegetation. The Project Area is located approximately 1,000 feet east of the Eel River but is visually independent from the Eel River. Roads that can be seen from the Project area include Kenmar Road, Eel River Drive, Riverwalk Drive, and US 101. The Project would be accessed via these roads, and no new access roads would need to be constructed to implement the Project.

Viewers of the Project include the general public traveling the corridor, including vehicle users, pedestrian, and cyclists. Viewers of the Project also include local residents living adjacent to or near the Project corridor and individuals employed at places of work based in or near the Project corridor. Visual changes may be more noticeable to local residents and non-vehicular users than vehicle-based users.

a) Have a substantial adverse effect on a scenic vista? (Less Than Significant Impact)

For purposes of determining significance under CEQA, a scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. The visual setting within which the proposed Project is in consists of a rural roadway corridor with some scenic views of the nearby Eel River. The Project Area and Eel River are visually independent, as the Eel River cannot be seen from the Project Area and vice versa due to elevational differences between the two features. None of the proposed Project features would obstruct the available scenic views of the Eel River or other rural scenic areas that surround the Project area.

Construction activities or operation of the Project would not obstruct scenic views. The visual impacts of the proposed Project would be compatible with the existing rural visual character of the corridor. Any vegetation incorporated into the Project would include low-maintenance planting designed to blend into the surrounding environment without blocking visibility for safe vehicular operation. The disturbed roadside areas would be restored/stabilized with a combination of grass seed (broadcast or hydroseed), straw mulch, rolled erosion control fabric, and, if needed, other plantings/revegetation. On- and off-site planting of willows and other native species associated with mitigatory plantings would result in additional vegetative screening, creating a visual benefit. Though the Project would expand the footprint of the interchange, the Project would be designed in to minimize removal of trees/densely forested areas and established vegetation.

The opportunity for new greenspace would enhance the visual character of the interchange while maintaining composition and unity of the site as well as providing safety improvements to better manage the levels of vehicular traffic. Center medians on Kenmar Road east of the northbound roundabout and Eel River Drive would also serve as pedestrian refuge islands and provide connectivity with new crosswalks. Furthermore, the proposed at-grade pedestrian improvements and installation of a Class I bike path through the Project Area would enhance multi-modal connectivity, thus increasing accessibility for the public while improving the visual appearance of the interchange.

Visual impacts of improvements in the Fortuna Park and Ride would be temporary during construction and upon completion of the Project, the overall aesthetic and visual quality and continuity of the facility would be enhanced due to enhanced landscaping and improved pedestrian and recreational access around the interchange and to nearby trails. The repaved and restriped parking lot would provide safe and convenient parking and access for vehicles while maintaining consistency with the existing rural visual character of the existing interchange area. Finally, the reconfigured Fortuna Park and Ride would not impede views of or diminish the visual character of nearby landmarks or natural resources.

New shared use paths, and curb ramps would be constructed on the north side of Kenmar Road, providing improved pedestrian and bicycle safety and enhanced connectivity to the opposite side of US 101. All retaining walls would be colorized and texturized to have similar facings to maintain conformity and enhance the visual aesthetic throughout the interchange corridor. The enhanced pedestrian access would improve public access through this interchange while maintaining the rustic/natural aesthetic of the area and safety improvements to better manage the levels of pedestrian and bicycle traffic.

The Project would not impair views of the adjacent Eel River and nearby rural areas as the proposed interchange improvements are consistent with the current land use of the area within and near the Project. The Project would improve the visual setting of the existing dilapidated roadway and interchange. The Project includes incorporation of greenspace into the improved roadway corridor, which would enhance the overall aesthetic of the Project Area. As such, there would be a less than significant impact to scenic vistas and visual resources.

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

The Project is not located within or near a state scenic highway (Caltrans 2019). US 101 that runs through the Project area is eligible for listing on the California State Scenic Highway list. Though the proposed Project would result in temporary construction impacts to improve and expand the interchange, the Project once complete, would result in an aesthetically improved roadway and improved traffic flow. As such, impacts to the aesthetic environment or scenic roadway resources would not result. Additionally, the Project Area does not include any historic trees or rock outcroppings. There are no historic buildings within the Project Area. There would be a less then significant impact on scenic resources.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view 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? (Less Than Significant Impact)

The visual quality of the roadway corridor would not be significantly altered by the Project. Views of local landmarks and resources from the Project corridor include Riverwalk RV Park, Eel River, a motel (Best Western Country Inn), the Fortuna Park and Ride, out of service railroad tracks crossing Kenmar Road, the Mill Creek riparian corridor, and a mix of open green space and forested areas (Appendix D – Visual Impact Assessment). On- and off-site planting of willow and other native species associated with mitigatory plantings would enhance visual character and scenic quality. Views of and access to these local landmarks and resources would not be negatively impacted by the proposed Project. The visual quality resulting from the Project would not be diminished or be inconsistent with the existing visual character of pre-Project viewsheds from local landmarks.

Although there would be visual modifications to the interchange as compared to existing conditions, the overall view-scape surrounding the Project area would not be impeded or altered by structures or other Project elements. As such, impacts to the visual character or quality of public view of the Project area and surrounding environment would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Less Than Significant Impact)

The Project does include some temporary and permanent sources of light. The Project would provide enhanced lighting to improve roadway visibility for drivers during night-time hours. Lighting is anticipated to be installed at ramp merges and diverges along the shoulders of US 101 as well as at conflict points in and out of the roundabout and at pedestrian crossings. Lighting would also be provided at approaches to the intersection to improve visibility of the changing roadway features.

Lighting would be designed to protect wildlife and night-time views, including views of the night sky. The Project would be designed to be consistent with the City's design guidelines, which includes standards for fixtures, shielding, wattage, placement, height, and illumination levels. To comply with these requirements, lighting for the Project would be directed downward and shielded except in situations where requirements of lighting for construction or traffic safety may take priority. This would ensure lighting is contained within the

site and does not cause significant lighting and glare impacts for surrounding land uses. The proposed Project would enhance and improve the existing lighting within the roadway corridor with the intention of improving safety of the interchange for pedestrians as well as motorists. However, the new lighting improvements would not substantially degrade the environment within/near the roadway corridor, nor should these improvements have a substantial impact on glare for nighttime driving. As such, impacts associated with light, glare and nighttime views in the area would be less than significant.

3.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?			✓	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			✓	
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			✓	

Within the Project Area, areas to the south of Kenmar road and buffered along US 101 are zoned as Agriculture Exclusive (Humboldt County 2020a). The Project Area within the City of Fortuna does not include agricultural or forest resources.

Eel River Area Local Coastal Plan

The Eel River Area Local Coastal Plan (Humboldt County 2014) includes the following applicable policies regarding agricultural lands:

– 30241: The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy and conflicts shall be minimized between agricultural and urban land uses through all of the following:
  - (b): By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses and where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.
  - (c): By developing available lands not suited for agriculture prior to the conversion of agricultural lands.
  - (d): By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

Prime Agricultural land per California Government Code Section 51201(c) means:

A. All land which qualifies for rating as Class I or Class II in the Soil Conservation Service land use capability classifications.

B. Land which qualifies for rating 80 through 100 in the Storie Index Rating.

C. Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the U.S.D.A.

D. Land planted with fruit or nut bearing trees, vines, bushes, or crops which have a non- bearing period of less than five years, and which would normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than $200.00 per acre. Humboldt County General Plan Adopted October 23, 2017, Part 2, Chapter 4. Land Use Element 4-32

E. Land which has returned from the production of unprocessed agricultural plant products on an annual gross value of not less than $200.00 per acre for three of the five previous years.

Humboldt County

The Humboldt County General Plan (2017) includes the following applicable policies regarding agricultural lands:

AG-G2. Preservation of Agricultural Lands

Agricultural land preserved to the maximum extent possible for continued agricultural use in parcel sizes that support economically feasible agricultural operations.

AG-P5. Conservation of Agricultural Lands

Agricultural lands shall be conserved, and conflicts minimized between agricultural and non-agricultural uses through all of the following:

A. By establishing stable zoning boundaries and buffer areas that separate urban and rural areas to minimize land use conflicts.

B. By establishing stable Urban Development, Urban Expansion and Community Planning Areas and promoting residential in-filling of Urban Development Areas, with phased urban expansion within Community Planning Areas.

C. By developing lands within Urban Development, Urban Expansion and Community Planning Areas prior to the conversion of agricultural resource production lands (AE, AG) within Urban Expansion Areas.

D. By not allowing the conversion of agricultural resource production lands (AE, AG) to other land use designations outside of Urban Expansion Areas.

E. By assuring that public service facility expansions and non-agricultural development do not inhibit agricultural viability, either through increased assessment costs, degradation of the environment, land fragmentation or conflicts in use.

F. By increasing the effectiveness of the Williamson Act Program.

G. By allowing historical structures and/or sensitive habitats to be split off from productive agricultural lands where it acts to conserve working lands and structures.

H. By allowing lot-line adjustments for agriculturally designated lands only where planned densities are met and there is no resulting increase in the number of building sites.

AG-P6. Agricultural Land Conversion – No Net Loss

Lands planned for agriculture (AE, AG) shall not be converted to non-agricultural uses unless the Planning Commission makes the following findings:

A. There are no feasible alternatives that would prevent or minimize conversion;

B. The facts support an overriding public interest in the conversion; and

C. For lands outside of designated Urban Development Boundaries, sufficient off-setting mitigation has been provided to prevent a net reduction in the agricultural land base and agricultural production. This requirement shall be known as the “No Net Loss” agricultural lands policy. “No Net Loss” mitigation is limited to one or more of the following:

1. Re-planning of vacant agricultural lands from a non-agricultural land use designation to an agricultural plan designation along with the recordation of a permanent conservation easement on this land for continued agricultural use; or
2. The retirement of non-agricultural uses on lands planned for agriculture and recordation of a permanent conservation easement on this land for continued agricultural use; or
3. Financial contribution to an agricultural land fund in an amount sufficient to fully offset the agricultural land conversion for those uses enumerated in subsections a and b. The operational details of the land fund, including the process for setting the amount of the financial contribution, shall be established by ordinance.

AG-P16. Protect Productive Agricultural Soils

Development on lands planned for agriculture (AE, AG) shall be designed to the maximum extent feasible to minimize the placement of buildings, impermeable surfaces or nonagricultural uses on land as defined in Government Code Section 51201(c) 1- 5 as prime agricultural lands.

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance)? (Less than Significant Impact)

Lands within the Project Area have not been formally analyzed by the Department of Conservation to determine if they meet the criteria for being designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, because the Farmland Mapping and Monitoring Program has not been completed for Humboldt County. Potential impacts would be related to construction operations, and not operations, thus operations are not discussed further. An operational impact would not result.

For this analysis, “agricultural soils” and “prime agricultural soils” designations via the Humboldt County WebGIS online mapping tool were utilized, which utilizes soils data from the Natural Resources Conservation Service [NRCS]. According to the Humboldt County WebGIS, the Project Area does include Prime Agricultural Soil along US 101 and Kenmar road (Humboldt County 2022b). This is located within parcel APN 201-152-013, zoned as agriculture exclusive, which the Project could affect with encroachment from widening of the southbound US 101 onramp slope.

Soil profile indicates a 1010 Urban land-Friendlycity association with 0 to 2 percent slopes, 210 Dungan with 0 to 2 percent slopes, and a 340 Fiedler-Petellen-Nanningcreek complex with 15 to 30 percent slopes are present within the Project Area (Appendix F of Appendix F – Wetland Delineation Report). The 210 Dungan soil is categorized as prime farmland if irrigated. The 210 Dungan soils located along the southbound onramp to US 101 ramp, and within parcel APN 201-152-103, are sloped above 2 percent grade, therefore not Dungan soils. It is also covered by shrubbery, thus not productive and not suitable for agricultural revenues. The toe of the slope that would be permanently converted to a non-agricultural use is currently excluded from grazing and other agrarian uses by an existing barbed wire fence at the bottom of the embankment. Per the definition of Prime Agricultural Land from the Eel River Area Local Coastal Plan, lands must be used for the three out of the past five years to qualify as prime farmland. The portion of the Project Area between the barbed wire fence and the guardrail has not been used for agricultural purposes during the past five years and therefore does not meet this criterion. Thus, this area is not Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. However, the Project would expand the toe beyond the existing fence line, resulting in approximately 3,028 ft2 (0.07 acres) of temporary impacts, and 2,196 ft2 (0.05 acres) of permanent impacts into parcel APN 201-152-013. This area is 210 Dungan soils within the 0 to 2 percent slopes and, assuming the field is irrigated, is prime farmland. This parcel is 30.02 acres, and a fill of 0.05 acres would be 0.17% of the parcel and therefore *di minimus*. Therefore, the impact would be less than significant.

b) Conflict with Agricultural Zoning or Williamson Act Contract? (Less than Significant Impact)

The Project would not be located on lands under a Williamson Act contract (Humboldt County 2022f). Within the Humboldt County jurisdiction south of Kenmar road, the western area of the Project is zoned as agricultural exclusive, and the area east of US 101 is residential agriculture (Humboldt County 2022a). The areas zoned as residential agriculture is wooded, and not currently used. The Project would require modification to the toe of the slope along Riverwalk Drive and the southbound onramp for US 101, resulting in areas of encroachment into parcel APN 201-152-013, zoned as agriculture exclusive. As analyzed above in section a), the toe would be expanded beyond the existing barbed wire fence, resulting in approximately 3,028 ft^2 (0.07 acres) of temporary impacts, and 2,196 ft^2 (0.05 acres) of permanent impacts. The parcel is used for agricultural grazing and a fill of 0.07 acres would be 0.17%, and therefore *di minimus.* Since the areas of encroachment would result in only 0.17% conversion of the parcel to a non-agricultural use, a less than significant impact would result.

c, d) Conflict with Forest Land Zoning or Convert Forest Land? (No Impact)

There are no forest lands, timberland, or timberland zoned Timberland Production in the Project Area; therefore, no forest land or timberland would be converted to non-forest or non-timberland use. No impact would result.

e) Convert Farmland or Forest? (Less than Significant Impact)

The Project would include the removal of some small trees. However, these trees not considered forest resources. Potential biological impacts associated with tree removal are discussed in Section 3.4 (Biological Resources). The Project involves a portion of a parcel zoned as agricultural exclusive. The parcel is generally used for grazing. As mentioned above, the 0.05 Acres that would be converted would result in 0.17% conversion of the parcel APN 201-152-013. There are no other changes in the existing environment

related to the Project that would impact farmland or forest land in or adjacent to the study area. The potential impact would be less than significant.

3.3 Air Quality

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?		✓		
b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		✓		
c) Expose sensitive receptors to substantial pollutant concentrations?			✓	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

The Project is located within the North Coast Air Basin (Air Basin) which is managed by the North Coast Unified Air Quality Management District (NCUAQMD). The NCUAQMD monitors air quality; enforces local, State, and federal air quality regulations for counties within its jurisdiction; inventories and assesses the health risks of Toxic Air Contaminants (TACs); and adopts rules that limit pollution.

For construction emissions, the NCUAQMD has indicated that emissions are not considered regionally significant for Projects whose construction would be relatively short in duration, lasting less than one year. For Project construction lasting more than one year or that involves above average construction intensity in volume of equipment or area disturbed, construction emissions may be compared to the stationary source thresholds. Construction is anticipated to last for approximately eighteen months. Since construction is anticipated to last more than one year, construction-related emissions were calculated using the Road Construction Emissions Model, (RCEM) version 9.0.0. See Appendix C for air quality modeling results.

a) Conflict with or obstruct implementation of the applicable air quality plan? (Less than Significant with Mitigation)

This impact relates to consistency with an adopted attainment plan. The NCUAQMD is responsible for monitoring and enforcing local, State, and federal air quality standards. Humboldt County is designated 'attainment' for all National Ambient Air Quality Standards. Pursuant to California Ambient Air Quality Standards, Humboldt County is designated attainment for all criteria air pollutants except PM_{10}. Humboldt County is designated as "non-attainment" for the State's PM_{10} standard.

PM_{10} refers to inhalable particulate matter with an aerodynamic diameter of less than 10 microns. PM_{10} includes emission of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} emissions include unpaved road dust, smoke from wood stoves, construction dust, open burning of vegetation, and airborne salts and other particulate matter naturally generated by ocean surf. Therefore, any use or activity that generates airborne particulate matter may be of concern to the NCUAQMD. The proposed Project would create PM_{10}

emissions in part through vehicles coming and going to the Project Area and the construction activity associated with the Project.

To address non-attainment for PM_{10}, the NCUAQMD adopted a Particulate Matter Attainment Plan in 1995. This plan presents available information about the nature and causes of PM_{10} standard exceedances and identifies cost-effective control measures to reduce PM_{10} emissions to levels necessary to meet California Ambient Air Quality Standards. However, the NCUAQMD states that the plan, "should be used cautiously as it is not a document that is required in order for the [NCUAQMD] to come into attainment for the state standard" (NCUAQMD 2022). Therefore, compliance with applicable NCUAQMD PM_{10} rules is applied as the threshold of significance for the purposes of analysis. NCUAQMD Rule 104 Section D, Fugitive Dust Emissions, is applicable to the Project.

Rule 104, Section D – Fugitive Dust Emissions is used by the NCUAQMD to address non-attainment for PM_{10}. Pursuant to Rule 104 Section D, the handling, transporting, or open storage of materials in such a manner, which allows or may allow unnecessary amounts of particulate matter to become airborne, shall not be permitted. Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to covering open bodied trucks when used for transporting materials likely to give rise to airborne dust and the use of water during the grading of roads or the clearing of land. During earth moving activities, fugitive dust (PM_{10}) would be generated. The amount of dust generated at any given time would be highly variable and is dependent on the size of the area disturbed at any given time, amount of activity, soil conditions, and meteorological conditions. Unless controlled, fugitive dust emissions during construction of the Project could be a potentially significant impact, therefore, Mitigation Measure AQ-1 would be incorporated to comply with NCUAQMD's Rule 104 Section D.

Operation of the Project would not include the handling, transporting, or open storage of materials in which particulate matter may become airborne. Due to the absence of handling, transport, or open storage of materials that would generate particulate matter, operation of the Project is not expected to conflict with NCUAQMD's Rule 104 Section D. No impact from operation of the Project would result.

Mitigation

Implementation of Mitigation Measures AQ-1 is proposed to reduce the potential impact related to PM_{10} fugitive dust by requiring BMPs.

Mitigation Measure AQ-1: BMPs to Reduce Air Pollution

The contractor shall implement the following BMPs during construction:

- Disturbed surfaces (e.g., staging areas, soil piles, active graded areas, excavations, and unpaved access roads) shall be watered as needed for dust suppression.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using street sweepers at least once per day, or as needed to alleviate dust and debris on the roadway.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour, unless the unpaved road surface has been treated for dust suppression with water, rock, wood chip mulch, or other dust prevention measures.
- All areas to be paved shall be completed as soon as practical.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes.

With implementation of Mitigation Measure AQ-1, the Project would implement relevant fugitive dust (PM10) controls during construction and would not conflict with applicable air quality plans. This impact would be reduced to a less-than-significant level with mitigation.

b) Result in a cumulatively considerable net increase in any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard? (Less than Significant with Mitigation)

This impact is related to regional criteria pollutant impacts. As identified in Section 3.3 Impact (a), Humboldt County is designated nonattainment of the State's PM_{10} standard. The Project Area is designated attainment for all other State and federal standards. Potential impacts of concern would be exceedances of State standards for PM_{10}. Localized PM_{10} is of concern during construction because of the potential to emit fugitive dust during earth-disturbing activities.

Construction

Localized PM_{10}

The Project would include clearing and grubbing, grading, and paving activity to replace the existing intersection of US 101 and Kenmar Road. Generally, the most substantial localized air pollutant emissions would be dust generated from site clearing, demolition, grading, placement of subgrade and paving. If uncontrolled, these emissions could lead to both health and nuisance impacts. Construction activities would also temporarily generate emissions of equipment exhaust and other air contaminants. The Project's potential impacts from equipment exhaust are assessed separately below.

The NCUAQMD does not have formally adopted thresholds of significance for fugitive, dust-related particulate matter emissions above and beyond Rule 104, Section D which does not provide quantitative standards. For the purposes of analysis, this document uses the Bay Area Air Quality Management District (BAAQMD) approach to determining significance for fugitive dust emissions from Project construction. The BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures recommended by BAAQMD are implemented for a project, then fugitive dust emissions during construction are not considered significant. BAAQMD recommends a specific set of "Basic Construction Measures" to reduce emissions of construction generated PM_{10} to less than significant. Without incorporation of these Basic Construction Measures, the Project's construction-generated fugitive PM_{10} (dust) would result in a potentially significant impact.

The Basic Construction Measure controls recommended by the BAAQMD are incorporated into Mitigation Measure AQ-1. These controls are consistent with NCUAQMD Rule 104 Section D, Fugitive Dust Emission and provide supplemental, additional control of fugitive dust emissions beyond that which would occur with Rule 104 Section D compliance alone. Therefore, with incorporation of Mitigation Measure AQ-1, the Project would result in a less than significant impact for construction-period PM_{10} generation and would not violate or substantially contribute to an existing or projected air quality violation.

Regional Criteria Pollutants

For construction emissions, the NCUAQMD has indicated that emissions are not considered regionally significant for projects whose construction would be of relatively short duration, lasting less than one year. For project construction lasting more than one year or that involves above average construction intensity in volume of equipment or area disturbed, construction emissions may be compared to the stationary source

thresholds. Since this Project's construction is anticipated to last longer than one year, comparison to stationary sources would be used as the threshold of significance.

The NCUAQMD does not have established CEQA significance criteria to determine the significance of impacts that would result from projects such as the proposed Project; however, the NCUAQMD does have criteria pollutant significance thresholds for new or modified stationary source projects proposed within the NCUAQMD's jurisdiction. NCUAQMD has indicated that it is appropriate for lead agencies to compare proposed construction emissions that last more than one year to its Best Available Control Technology (BACT) thresholds for stationary sources identified in Rule 110(E)(1), which are:

– Nitrogen Oxides – 40.0 tons per year, 50.0 pounds per day
– Reactive Organic Gases – 40.0 tons per year, 50.0 pounds per day
– PM_{10} – 15.0 tons per year, 80.0 pounds per day
– Carbon Monoxide – 100 tons per year, 50.0 pounds per day

RCEM v. 9.0.0 was used to estimate air pollutant emissions from Project construction (Appendix C – Air Quality Modeling Results). Detailed construction equipment activity and material hauling volumes were provided by the Project's Design Team. The Project's estimated construction emissions are provided in Table 3.3-1 and 3.3-2 for annual and daily emission rates, respectively. As shown in the tables, the Project would not exceed the NCUAQMD's thresholds of significance. Therefore, the Project's construction emissions are considered to have a less than significant impact.

Table 3.3-1 Annual Construction Regional Pollutant Emissions

Parameter	Total Emissions (tons/project)			
	ROG	NOX	CO	PM10
Project Construction	0.54	5.40	5.67	0.49
NCUAQMD Stationary Source Thresholds	40.0	40.0	100	15.0

Table 3.3-2 Daily Construction Regional Pollutant Emissions

Parameter	Maximum Daily Emissions (pounds/day)			
	ROG	NOX	CO	PM10
Project Construction	3.55	36.71	36.44	3.11
NCUAQMD Stationary Source Thresholds	50.0	50.0	80.0	50.0

Operation

Following construction, the Project would not include any stationary sources of air emissions, traffic capacity enhancements, or result in an increase in traffic volumes or increased delay over existing conditions. The proposed roadway improvements would likely increase multi-modal use of the roadway which may decrease vehicle trips and associated emissions. Traffic flow would improve; thus, the Project would result in less vehicle idling and an associated reduction in exhaust emissions. Vehicle trips associated with operation and maintenance of the road would be the same as under existing conditions, include annual inspections, repaving, painting, and repairs as needed. Operation and maintenance of the Project would generate less than one traffic trip per week on average. However, larger repairs to the road or

sidewalk facilities may take several weeks to complete depending on the extent of damage and other circumstances. However, the potential need for larger repair would remain the same as under existing conditions. The Project would not result in an increase in operational emissions of criteria air pollutants above existing conditions. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment. The Project's operational impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations? (Less than Significant)

Sensitive receptors include school-aged children (schools, daycare, playgrounds), the elderly (retirement community, nursing homes), the infirm (medical facilities and offices), and those who exercise outdoors regularly (public and private exercise facilities, parks). The nearest residence to the Project site is an RV park adjacent to the western side of the Project, several residences approximately 500 feet to 1,000 feet south, southeast and 900 feet northeast of the Project, and Fortuna Junior Academy approximately 900 feet east of the Project.

Construction of the Project would be short in duration and would vary in location, thus not resulting in concentrated pollutants in any one area. Because of the distance to potential sensitive receptors, limited construction period, and geographical distribution of construction activities, exposure of sensitive receptors to substantial pollutant concentrations during Project construction would be less than significant.

For Project operations, the Project would modify the path of travel for vehicles. For reference, the California Air Resources Board's (CARB) Air Quality and Land Use Handbook: A Community Health Perspective (Land Use Handbook) provides CARB's recommendations regarding the siting of new sensitive land uses near facilities that are associated with health risks, particularly from air toxic emissions. The Land Use Handbook has siting guidance for freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities. Although this guidance is for siting new locations of sensitive receptors, the facility distance and size guidance may be used as a screening level to identify when additional analysis is warranted during environmental review, including CEQA.

The Land Use Handbook advisory recommendation for freeways and high traffic roads are:

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.

The nearest sensitive receptors are homes located approximately 500 feet south of the Project alignment. The Traffic Operations & Intersection Control Evaluation (TOAR & ICE) Report prepared for the Project includes daily roadway volume counts conducted in 2016. At the Kenmar Road and Eel River Drive intersection, the Project component closest to the residences south of the Project, the daily volume was 13,720, or 27 percent of the rural road screening volume provided in the CARB Land Use Handbook. The Project would not substantially reduce the distance between travel lanes and sensitive receptors, would not exceed the CARB's screening volume for rural roads, and would provide the CARB-recommended minimum separation of 500 feet between the roadway and sensitive receptors. Additionally, the Project would have no effect on vehicle mix through the Project area. The Project meets the Land Use Handbook's advisory guidance for an appropriate separation of the Project location and sensitive receptors. Therefore, additional analysis is not warranted.

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

Implementation of the Project would not result in major sources of odor. The Project type is not one of the common types of facilities known to produce odors (i.e., landfill, coffee roaster, wastewater treatment facility, etc.). Minor odors from the use of equipment during construction activities would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. This impact would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		✓		
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?		✓		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			✓	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

A Natural Environment Study (NES), Wetland Delineation Report, and Botanical Report were prepared to assess baseline environmental conditions within the Project Area and are included as Appendix E, F, and G, respectively. These studies evaluate the potential for any special status plants, wildlife species, or any sensitive natural communities (SNCs) or aquatic resources to occur. Under Section 7 of the ESA, critical habitat should be evaluated if designated for federally listed species that may be present in the Biological Study Area (BSA). The BSA, or the area directly or indirectly impacted by the proposed Project, encompasses a 0.25-mile radius around the Project Area.

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional

plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Less Than Significant with Mitigation)

Special-status Plant Species

Special status plant species under State jurisdiction include those listed as endangered, threatened, or as candidate species by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA). Plant species on CNPS California Rare Plant Ranking (CRPR) Lists 1A, 1B and 2A and 2B are considered eligible for state listing as endangered or threatened pursuant to the California Fish and Game Code and CDFW has oversite of these special status plant species as a trustee agency. As part of the CEQA process, such species should be considered as they meet the definition of Threatened or Endangered under Sections 2062 and 2067 of the California Fish and Game Code. There are occasions where CRPR List 3 or 4 species might be considered of special concern particularly for the type locality of a plant, for populations at the periphery of a species range, or in areas where the taxon is especially uncommon or has sustained heavy losses, or from populations exhibiting unusual morphology.

Two seasonally appropriate floristic surveys for special status plants were conducted in the Project Area. No special status plants were detected in the Project Area. GHD conducted surveys for special status plant species and vegetation assessments during the spring and summer of 2021 (April 7 and July 30).

Based on database searches, historical records, and an overview of the primary literature, only two special status species had a moderate potential of occurring in the Project Area. Howell's montia (*Montia howellii)* has a CRPR of 2B.2 and Siskiyou checkerbloom (*Sidalcea malviflora ssp. patula)* has a CRPR of 1B.2. Both had a moderate likelihood of occurring within the Project Area. Fifteen additional special status species were thought to have a low likelihood of occurring within the Project Area (Appendix G – Botanical Report). On- and off-site planting of willow and other native species associated with mitigatory plantings would enhance and expand suitable habitat for special status species and would not result in a significant impact to sensitive plant species. Given that required protocol level plant surveys are completed with no detections of sensitive plant species, the impact on special-status plants is considered less than significant.

Special-status Terrestrial Mammal Species

The only special status terrestrial mammal species with the potential to occur in the Project Area is the North American Porcupine (*Erethizon dorsatum*), which is a State Special Status Species and whose potential to occur in the Project Area was assessed in the Natural Environment Study (Appendix E). North American Porcupines are primarily nocturnal but can sometimes be seen during the day. Their range extends across mainland Canada, Alaska, and the western and northeastern United States. They use a wide variety of habitats, but are most common in montane conifer, Douglas fir, alpine dwarf-shrub. A population in Del Norte County, centered in Tolowa Dunes State Park, is especially known to concentrate in riparian areas. Porcupines are herbivores and feed on a variety of plant materials depending on the season. They feed on berries, seeds, grasses, leaves, roots and stems during the spring and summer. In contrast, they primarily feed on evergreen needles and tree bark during the winter.

The closest known record is from 2016 along US 101, approximately 4.75 miles south of the Project Area (Appendix E – Natural Environment Study). Suitable habitat for this species is limited in the Project Area to narrow strip of riparian vegetation near Mill Creek; however, they may to occur in the greater BSA. With the incorporation of avoidance and minimization measures, the potential impact to North American Porcupine would be less than significant.

The Project Area does not provide suitable foraging or denning habitat for the North American Porcupine**.** However, habitat within the greater BSA may serve as suitable habitat for these species. With the

implementation of avoidance and minimization measures, potential impacts to the North American Porcupine would remain less than significant.

Special Status Invertebrate Species

There are three special status invertebrate species recorded in the CNDDB as known to occur nearby and that the BSA likely provides suitable habitat: California Floater (*Anodonta californiensis*), Western Ridged Mussel (*Gonidea angulata*), and Western Pearlshell (*Margaritifera falcata*). Special status mollusks and insects were evaluated in the Natural Environment Study (Appendix E). The Project does not involve the waters of Mill Creek where the three invertebrate species are found. Given that no in-water work, culvert replacement or modification, or channel alteration within Mill Creek would occur, direct impacts to mollusks would not result. Erosion control required under Environmental Protection Action 1 (SWPPP) and spill prevention would be implemented to avoid indirect impacts associated with sedimentation and accidental spills. Impacts to special status invertebrates would be less than significant.

Obscure Bumble Bee (*Bombus caliginosus*) occur in coastal habitat within the fog-belt from British Columbia to southern California. Preferred plants for foraging include the following genera: Baccharis, Cirsium, Lupinus, Lotus, Grindelia, Phacelia. The closest known record is from 1968 in Ferndale, approximately 6 miles west of the Project Area (Appendix E – Natural Environment Study). Recent records are from 2014 near Pamplin Grove, approximately 10 miles southeast of the Project Area. The Project Area and BSA fall within the species current range. In addition, the Project Area and BSA are within the coastal fog belt and includes several of the species' food plants.

Western Bumble Bees (*Bombus occidentalis*) were historically widespread in coastal valleys and foothills throughout western North America. However, the species has experienced precipitous declines and they are now regionally rare. Western Bumble Bees are habitat generalists but require reliable sources of nectar plants and pollen resources (blooming periods from spring through fall). The closest known record is from 1970 in Fortuna, within 1 mile of the Project Area (Appendix E – Natural Environment Study). There are no recent documented occurrences of this species within the BSA or nearby. Although the Project Area and BSA fall within the species’ pre-2002 range, the range has contracted significantly in the last decade and now primarily includes the intermountain west and cascade regions of the US. This being the case, the species is not expected to occur in the Project Area or BSA during construction.

Some nectar sources that could be utilized by Obscure Bumble Bee and Western Bumble Bee were observed. Vegetation removal would be limited to minor roadside vegetation and would include minor mowing and minor brush removal. No impacts to large areas of nectar sources or open meadow are expected. Project design (including staging and stockpile locations) considered minimization of impacts to vegetation and sensitive wildlife habitat during design. Impacts to special status insects would be less than significant.

Special-status Fish Species

The Project Area contains suitable habitat for federally and state listed anadromous salmonids as well as state special status Pacific Lamprey, Western Brook Lamprey, and summer-run Steelhead Trout within Mill Creek. Special-status fish species were evaluated in the Natural Environment Study (Appendix E).

Federally listed Coho Salmon (*Oncorhynchus kisutch*), Northern California Steelhead (*Oncorhynchus mykiss irideus*), and Chinook Salmon (*Oncorhynchus tshawytscha*) are known to occur nearby in the Eel River. The Eel River supports populations of all three of these species. Additional species which could be nearby include Pacific Lamprey (*Entosphenus tridentatus*) and Western Brook Lamprey (*Lampetra*

richardsoni), which are a State Species of Special Concern, and Coastal Cutthroat Trout (*Oncorhynchus clarkia clarkia*), also a State Species of Special Concern.

Coho Salmon, Chinook Salmon, and Northern California Steelhead may occur in the Strongs Creek watershed. The existing culvert under Kenmar Road within the Project Area is passable for anadromous salmonids and would not be modified as part of the Project.

Pacific Lamprey range from the Japan to the Bering Sea in Alaska and along the west coast of North America to central Baja, California. Pacific Lamprey are anadromous with typical spawning from March through July. Pacific Lamprey are common in the Eel River year-round and are known to occur in the Strongs Creek watershed (Appendix E – Natural Environment Study). Suitable rearing and migratory habitat and potentially spawning habitat are present for Pacific Lamprey in Mill Creek within the BSA. Based on suitable aquatic habitat, the species may be present in the BSA within Mill Creek, although no suitable habitat is present in the Project Area.

The Western Brook Lamprey is a small non-migratory lamprey that resides in freshwater. They inhabit coastal streams along the Pacific Coast from Alaska to California, with spawning typically occurring March-July. Western Brook Lamprey are known to occur in the Strongs Creek watershed. Suitable rearing and migratory habitat and potentially spawning habitat are present for Western Brook Lamprey in Mill Creek within the BSA (Appendix E – Natural Environment Study). Based on suitable aquatic habitat, the species may be present in the BSA within Mill Creek, although no suitable habitat is present in the Project Area.

Coastal Cutthroat Trout (*Oncorhynchus clarkia clarkia*) ranges from the southernmost extent of its range in the Eel River (California) to Prince Williams Sound in Alaska. Coastal Cutthroat Trout usually occupy smaller tributary streams. Spawning can occur from December through May. Despite widespread decline throughout its range, Coastal Cutthroat Trout populations are present in the Eel River as well as lower Eel River tributaries. Additionally, the species is known to occur in the Strongs Creek watershed. The closest known occurrence record is from 1990 in the Eel River (0.35 miles west of the Project Area) and its tributaries (Appendix E – Natural Environment Study). Suitable rearing and migratory habitat are present for Coastal Cutthroat Trout in Mill Creek within the BSA. However, no spawning habitat (based on lack of graveled stream bottom in Mill Creek) is present in the BSA. Based on suitable aquatic habitat, the species may be present in the BSA within Mill Creek, although no suitable habitat is present in the Project Area.

The Northern California Steelhead (*Oncorhynchus mykiss irideus*) occupies river basins from Redwood Creek in Humboldt County to the Gualala River (near the Mendocino/Sonoma County line). Both summer and winter-run Steelhead are included in this DPS. Steelhead spend their adult lives in marine environments, returning to freshwater at the age of four or five to spawn, usually in their stream of origin. Juveniles remain in fresh water for one or two years before returning to saltwater, with emigration typically occurring from March through June. Juvenile Steelhead (not distinguishable to run type) have been documented in Strongs Creek as recently as 2009 (Appendix E – Natural Environment Study). Both winter-run and summer-run Steelhead are found in the Eel River. Recreational fishermen have reported four catches of this species in nearby Jameson Creek, another tributary to Strongs Creek. Suitable rearing and migratory habitat are present for Steelhead in Mill Creek within the BSA. However, no spawning habitat (based on lack of graveled stream bottom in Mill Creek) is present in the BSA. Based on suitable aquatic habitat, the species may be present in the BSA within Mill Creek, although no suitable habitat is present in the Project Area.

Given that no in-water work, culvert replacement or modification, or channel alteration within Mill Creek would occur, direct impacts to anadromous fish would not result. Erosion control required under Environmental Protection Action 1 (SWPPP) and spill prevention would be implemented to avoid indirect

impacts associated with sedimentation and accidental spills. Impacts to special status fish would be less than significant.

Special-status Amphibian and Reptiles Species

There are two special status amphibian species recorded in the CNDDB as known to occur nearby and that the BSA likely provides suitable habitat for: the Northern Red-legged Frog and Foothill Yellow-legged Frog.

Northern Red-legged Frogs (*Rana aurora*) are a State Species of Concern and occur along the west coast of North America from British Columbia to California and were evaluated in the Natural Environment Study (Appendix E). The geographic range split between the Northern and California Red-legged Frog species occurs just south of Elk Creek in Mendocino County where both species overlap. Northern Red-legged Frogs are typically found near freshwater sources (e.g., wetlands, ponds, streams, etc.). However, they can range widely and inhabit damp places far from water. Northern Red-legged Frogs reproduce in water from December to February in Humboldt County, with some breeding occurring as late as March. Preferred egg laying locations are in “vegetated shallows with little water flow in permanent wetlands and temporary pools.” Northern Red-legged Frogs are relatively common in and near coastal portions of Humboldt County and the closest known occurrence record is from 1993 on private timberlands, approximately 4.15 miles south of the Project Area (Appendix E – Natural Environment Study). The BSA includes suitable breeding, foraging, and overwintering habitat, especially within the riparian habitat and wetlands surrounding Mill Creek. Northern Red-legged Frogs have a moderate chance of occurring within the Project Area. Therefore, the potential impact on Northern Red-legged frogs is considered potentially significant.

Foothill Yellow-legged Frogs occur from sea level to elevations of 7,000 feet and range from the Willamette River in Oregon south to the Upper San Gabriel River in California, including the coast ranges and Sierra Nevada Foothills. The species prefers open to partially shaded, perennial streams with rocky substrate, often near riffles. These rivers and streams are typically bordered by chaparral, riparian habitat, mixed conifer forest, or wet meadows. Streams are usually small to mid-size with shallow pools and slow-moving water. They are also found at river edges, in calm pools, and vegetated backwaters. Rocky, cobble substrate (3 in or larger) is preferred, particularly for egg laying sites. Breeding activity typically occurs from March through May with some regional variation (breeding in northern California is reported to occur from April through June). The closest known occurrence record, including adults, juveniles, and young of the year, is from 2018 at the mouth of Strongs Creek on the Eel River near the Fortuna Wastewater Treatment Plant, approximately one mile northwest of the Project Area (Appendix E – Natural Environment Study). The BSA includes requisite foraging and overwintering habitat within Mill Creek. However, no breeding habitat (e.g., sunny gravel/cobble river bars) occurs. The potential impact on Yellow-legged frogs is considered potentially significant.

Western Pond Turtles (*Emys marmorata*) are a State Species of Concern and occur in a variety of permanent and semi-permanent freshwater aquatic habitats including lakes, rivers, ponds, creeks, and marshes and were also assessed in the Natural Environment Study (Appendix E). Nesting occurs on land in areas of loose to hard-packed soils on south or west facing slopes. The species is frequently observed basking on exposed banks, logs, and rocks. Winter activity is possible but limited to unusually warm, sunny days. Normally pond turtles are dormant during winter months on the north coast, which typically involves the turtle burrowing into loose substrate above the high-water mark. The closest known record is from 2020 approximately 3 miles north of the Project Area (Appendix E – Natural Environment Study). The Project Area and BSA include suitable aquatic habitat within the Mill Creek and a potentially significant impact exists.

Mitigation

Mitigation Measure BIO-1: Protect Special Status Amphibians and Reptiles

No more than one week prior to commencement of ground disturbance within 50 feet of mapped wetlands, riparian habitat associated with Mill Creek, and Sensitive Natural Communities within the Project Area, a qualified biologist shall perform a pre-construction survey and shall relocate any individuals of Northern Red-legged Frog, Yellow-legged Frog, or Western Pond Turtle or egg masses of Northern Red-legged Frog that occur within the work-impact zone to nearby suitable habitat.

In the event that a Northern Red-legged Frog, Yellow-legged Frog, or Western Pond Turtle is observed in an active construction zone, the contractor shall halt construction activities in the area where observed and the frogs or turtles shall be moved to a safe location in similar habitat outside of the construction zone.

Additionally, mitigation Measure BIO-1 would reduce the impact of the Project on special status amphibians and reptiles to less-than-significant levels by requiring pre-construction surveys by qualified biologists prior to work in applicable habitats, and measures to avoid take of species.

Special Status, Migratory, and Nesting Birds

In support of the NES (Appendix E), reconnaissance-level bird surveys occurred at the Project Area. There are seven state special status avian species recorded in the CNDDB as known to occur nearby and that the BSA likely provides suitable habitat for: Cooper's Hawk (*Accipiter cooperi*), Sharp-shinned Hawk (*Accipiter striatus*), Great Egret (*Ardea alba*), Great Blue Heron (*Ardea herodias*), Bank Swallows (*Riparia riparia*), Snowy egret (*Egretta thula*), and Black-crowned Night-heron (*Nycticorax nycticorax*).

In addition, native migratory birds may also be present at the Project Area. Mill Creek within the Project Area and BSA includes suitable foraging habitat for numerous avian species including Great Egrets, Great Blue Herons, and Bank Swallows among others. The riparian habitat surrounding Mill Creek although narrow likely provides suitable nesting habitat for various avian species such as Cooper's Hawks or Sharp-shinned Hawks as well as other common bird species. Most nearby habitat was low, mowed fields. If nesting passerines or raptors were present in trees in the Project Area, construction noise and/or tree removals would have the potential to impact the species. The impact is considered potentially significant.

Mitigation Measure BIO-2 would reduce the potential impacts to special status, migratory, and nesting birds to less-than-significant levels by requiring pre-construction surveys by qualified biologists prior to work in applicable habitats, and measures to avoid take of species.

Mitigation

Mitigation Measure BIO-2: Protect Special Status, Migratory, and Nesting Birds

Ground disturbance and vegetation clearing shall be conducted, if possible, during the fall and/or winter months and outside of the avian nesting season (March 15 – August 15) to avoid any direct effects to special status and protected birds. If ground disturbance cannot be confined to work outside of the nesting season, a qualified biologist shall conduct pre-construction surveys within the vicinity of the Project Area, to check for nesting activity of native birds and to evaluate the site for presence of raptors and special status bird species. The biologist shall conduct at minimum a one-day pre-construction survey within the 7-day period prior to vegetation removal and ground-disturbing activities. If ground disturbance and vegetation removal work lapses for seven days or

longer during the breeding season, a qualified biologist shall conduct a supplemental avian pre-construction survey before Project work is reinitiated.

If active nests are detected within the construction footprint or within the construction buffer established by the Project biologist, the biologist shall flag a buffer around each nest. Construction activities shall avoid nest sites until the biologist determines that the young have fledged, or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within the construction buffer, nest buffers will be implemented as needed. In general, the buffer size for common species will be determined on a case-by-case basis in consultation with CDFW. Buffer sizes will take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviors of the nesting birds.

If active nests are detected during the survey, the qualified biologist shall monitor all nests at least once per week to determine whether birds are being disturbed. Activities that might, in the opinion of the qualified biologist, disturb nesting activities (e.g., excessive noise), shall be prohibited within the buffer zone until such a determination is made. If signs of disturbance or distress are observed, the qualified biologist shall immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased, placement of visual screens or sound dampening structures between the nest and construction activity, reducing speed limits, replacing and updating noisy equipment, queuing trucks to distribute idling noise, locating vehicle access points and loading and shipping facilities away from noise-sensitive receptors, reducing the number of noisy construction activities occurring simultaneously, and/or reorienting and/or relocating construction equipment to minimize noise at noise-sensitive receptors.

With implementation of avoidance and minimization measures, any potential Project-related impacts to special status and nesting migratory bird species and with the implementation of Mitigation Measure BIO-2, would be less than significant.

Bats

There are three special status bat species recorded in the CNDDB as known to occur nearby and have the potential to be present at or near the Project Area: Townsend's Big-eared Bat (*Corynorhinus townsendii*), Hoary Bat (*Lasiurus cinereus*), and Yuma myotis (*Myotis yumanensis*). These species and their potential to occur in the Project Area were assessed in the NES (Appendix E).

The Project Area is unlikely to provide high-quality foraging and roosting habitat for sensitive bat species. However, the greater BSA is likely to provide foraging and roosting habitat for bats. As only small trees (<12-inch diameter at breast height [dbh]) would be removed during Project implementation, it is unlikely that any physical impacts to bat or bat roosting sites would occur. Additional BMP avoidance and minimization measures for sensitive bat species and roosts include minimizing Project-related lighting should nighttime work occur and focusing light on active construction areas and areas needed for safety, security, or other essential requirements. With the incorporation of avoidance and minimization measures, potential impacts to special status bats would remain less than significant.

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 Game or US Fish and Wildlife Service? (Less Than Significant with Mitigation)

Sensitive Natural Communities

Protocol level vegetation assessments and mapping of sensitive natural communities occurred on April 7 and July 30 of 2021. One vegetation association qualified as a Sensitive Natural Community (SNC), and vegetation communities within the Project Area were comprehensively assessed in the NES (Appendix E). Shining willow groves (*Salix lasiandra var. lasiandra*), a SNC, occur to the west of US 101. This community was observed along the boundary of the agriculture pasture concentrated near the intersection of Riverwalk Drive and the US 101 southbound on ramp, located along the western extent of the Project Area. The alliance was concentrated along the slope above the wet pasture and around a ditch where stormwater runoff collects from southern Riverwalk Drive and US 101.

Shining willow groves alliance has a state ranking of S3.2 and is considered Sensitive by CDFW. The vegetation mapped as Shining willow grove alliance is dominated by wetland indicator species and is within the Coastal Zone. As such, it was mapped as a Coastal Commission one-parameter wetland. Please see the Wetland Delineation Report (Appendix F) for additional details on wetlands that may be subject to Coastal Commission, state water board, and United States Army Corps of Engineers (USACE) jurisdiction.

Mapped sensitive natural communities would be avoided to the greatest extent practicable; however, the Project would result in approximately 1,239 ft^2 (0.03 acres) of temporary impacts, and approximately 9,405 ft^2 (0.2 acres) of permanent impacts within the Project Area. This impact to the Shining willow grove SNC would be potentially significant.

Mitigation

Mitigation Measure BIO-3: Compensatory Mitigation for Sensitive Natural Communities

Construction within mapped Sensitive Natural Communities (Shining willow groves) shall be avoided to the greatest extent practicable. If impacts are unavoidable and Shining willow groves are removed or detrimentally impacted, mitigation will occur at a minimum ratio of 1:1. A Mitigation and Monitoring Plan shall be prepared in coordination with State resource agencies. Onsite locations for wetland mitigation shall be prioritized. If suitable locations for onsite mitigation is not sufficiently available, offsite mitigation shall occur at locations identified in Figure 3

The Plan shall be acceptable to State agencies with jurisdiction and include the following elements: proposed mitigation ratios; description and size of the restoration or compensatory area; site preparation and design; plant species; planting design and techniques; maintenance activities; plant storage; irrigation requirements; success criteria; monitoring schedule; and remedial measures. The ratio and conditions of mitigation will be negotiated in consultation with the City and State resource agencies with jurisdiction over sensitive natural communities. The Plan shall be implemented by the City.

Mitigation Measure BIO-3 requires avoidance and minimization of permanent impacts and temporary impacts to sensitive natural communities during construction, restoration of pre-Project conditions at the conclusion of construction, and compensation (replacement) of sensitive natural communities, thereby reducing potential impacts to natural communities to a less-than-significant level.

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? (Less Than Significant with Mitigation)

Wetlands

A wetland delineation was completed in 2021 (Appendix F) to determine the extent of wetlands and other waters within the Project Area based on hydrophytic vegetation, hydric soils, and wetland hydrology using methods and indicators outlined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region. The Project Area falls both within and outside of the Coastal Zone, and potential three-parameter and one-parameter wetlands were documented.

Mill Creek, a perennial water of the U.S. and state, flows through a bridge under Kenmar Road within the Project Area. A total of 14,772 ft2 (0.34 acres) of three-parameter wetlands occur within the Project Area, all likely under the jurisdiction of the RWQCB, with 13,644ft2 regulated by the USACE. A small patch of three-parameter wetlands was observed in the northern portion of the Project Area ("W1"), and a larger patch of three-parameter wetlands observed in the western extent of the Project Area ("W3") (Appendix F – Wetland Delineation Report).

Vegetation communities with FAC or wetter dominant vegetation are subject to Humboldt County and CCC jurisdiction as one-parameter wetlands under the Coastal Act and the Eel River Area Plan. One-parameter wetlands include Shining willow groves, and non-native pasture. Two intermittently flowing ditches that exhibited Ordinary High Water features were identified within the Project Area. The two ditches appear to flow seasonally alongside Riverwalk Drive and through a culvert under Riverwalk Drive to the wet pasture below. Ditch 1 (northern) and Ditch 2 (southern) appeared to have been constructed to convey stormwater around the intersection of Riverwalk Drive and US 101, and they drain into the agricultural field associated with Wetland 3. A total of approximately 28,760 ft^2 (0.66 acres) of one-parameter wetlands and approximately 560 ft^2 (0.01 acres) of intermittent waters (Ditch 1 and Ditch 2) occur within the Coastal Zone. Data forms are attached to the Wetland Delineation Report showing sample plot data collected in transects across wetland boundaries and additional upland sampling points (Appendix F – Wetland Delineation Report).

Table 3.4-3.1 Approximate Estimated Project Wetland Impacts

Impact Type	Total Within Project Area Square Feet	Temporary Impact Square Feet	Permanent Impact Square Feet
One Parameter Wetlands	28,760	3,960	14,180
Three Parameter Wetlands	14,770	790	0
Other Waters of the US (Two ditches)	730	620[1]	0

[1] Ditches would be reconstructed in-kind in the same general location. If final design plans do not allow for replacement, the impact would be determined to be permanent and mitigated within the Project Area or at offsite locations (Figure 3).

Potential impacts to seasonal wetland and other jurisdictional waters would be significant. Mitigation Measures BIO-4 and BIO-5 would be incorporated into the Project to reduce impacts to wetlands to a less than significant level.

Mitigation

Mitigation Measure BIO-4: Avoidance and Minimization Measures to Protect Adjacent Wetlands

The City shall implement the following avoidance and protection measures for Waters of the United States and Waters of the State adjacent to areas of planned disturbance that will not be impacted (filled or excavated) during Project construction:

- The City shall attempt to avoid or minimize impacts to wetlands/waters to the greatest extent feasible in the final design plans.
- Adjacent wetlands shall be clearly identified in the construction documents and reviewed by the City prior to issuing for bid to ensure they are clearly marked as equipment exclusion zones during construction.
- Suitable perimeter control BMPs, such as silt fences, or straw wattles shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These BMPs shall be installed prior to any clearing or grading activities.

Mitigation Measure BIO-5: Compensate for Loss of Wetlands and Waters

The City shall avoid fill of seasonal wetlands and waters, to the extent feasible. If fill cannot be avoided, the City shall compensate for the loss of seasonal wetland habitat so that there is no net loss in wetlands. The City shall compensate for impacts to identified wetlands through restoration, rehabilitation, and/or creation of wetland at a ratio of no less than 1:1.2. A Mitigation and Monitoring Plan shall be prepared in coordination with the NCRWQB, the USACE, and Humboldt County. Compensation for wetlands shall occur so there is no net loss of wetland habitat at ratios to be determined in consultation with the NCRWQCB. Onsite locations for wetland mitigation shall be prioritized. If suitable locations for onsite mitigation is not sufficiently available, offsite mitigation shall occur at locations identified in Figure 3. The Plan shall be acceptable to the regulatory agencies with jurisdiction over wetlands and waters and include the following elements: proposed mitigation ratios; description and size of the restoration or compensatory area; site preparation and design; plant species; planting design and techniques; maintenance activities; plant storage; irrigation requirements; success criteria; monitoring schedule; and remedial measures. The Plan shall be implemented by the City.

The City shall also compensate for impacts to other waters by obtaining required permits from the U.S. Army Corp of Engineers, the North Coast Regional Water Quality Control Board, and Humboldt County shall be received prior to the start of any on-site construction activity. The City shall ensure any additional measures outlined in the permits are implemented.

Mitigation Measures BIO-4 and BIO-5 require avoidance and minimization of permanent impacts and temporary impacts to wetlands during construction, restoration of pre-Project conditions at the conclusion of construction, and compensation of regulated wetlands. Implementation of Mitigation Measures BIO-3 through BIO-5 would reduce potential impacts to wetlands to a less-than-significant level.

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? (No Impact)

Project construction and operations do not include in-water work or any other activity that might impede fish migration. Terrestrial Project construction and operations do not include construction of any barriers to wildlife migration (e.g., fencing, highly developed roadway, or large structures). No impact would result.

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

City of Fortuna

The majority of the Project is within the jurisdiction of the City of Fortuna. The City of Fortuna General Plan's Resource Management and Conservation Element establishes policies to protect biological resources within City limits including protected streams and wetlands (City of Fortuna 2010). Applicable policies include:

Policy NCR-2.1: Riparian Corridor Protection

The City shall establish riparian buffers to provide for fish and terrestrial wildlife habitat protection, enhancement, and movement along riparian corridors through the Planning Area. Activities within these buffers shall be limited to passive recreational uses (hiking, biking, sightseeing, horseback riding) and the movement of wildlife.

Policy NCR-2.8: Native Vegetation

The City shall coordinate with resource agencies to require the preservation of native vegetation, while managing areas with high concentrations of invasive species and/or noxious weeds and preventing their encroachment into new areas.

Policy NCR-2.10: Wetland Identification and Protection

In considering new development projects, the City shall conduct an initial screening, as described in Policy NCR-2.6 in order to determine whether the proposal would have the potential to impact wetlands. If the initial screening indicates the potential presence of wetlands, a wetland assessment/ delineation shall be prepared to determine the presence of jurisdictional wetlands. The assessment/delineation, with proposed mitigation, shall be submitted to the City, and appropriate state (CDF&G) and federal (USCOE) agencies for concurrence prior to permitting. Mitigation may include, but may not be limited to, avoidance, minimization of impacts, restoration, off-site replacement, and/or the use of buffers.

Policy NCR-2.12: Permitted Activities with ESHAs

The following activities shall be permitted in ESHAs with approval from the Fortuna Planning Department and after consultation with Responsible and Trustee agencies: THPs; removal of dead, dying or diseased trees or downed vegetation within the streambed or streambank; the removal of vegetation obstructing streamflow or causing streambed or streambank erosion; and road crossings.

Policy NCR-15b: Streamside Management and Wetland Protection

New development/activities within SMAs shall be limited to: (1) activities for wildlife enhancement/ restoration, flood control or drainage, new fencing so long as it would not impede natural drainage or wildlife, and bank protection; (2) commercial timber management and harvest activities regulated by the

Forest Practices Act; (3) road and bridge replacement or construction, when it can be demonstrated that it would not degrade fish and wildlife resources or water quality; (4) removal of vegetation for disease control or public safety; and (5) management and maintenance of trees, shrubs and other plant life.

Policy NC-2.13: Watercourse, Wetland and Riparian Buffers

The City shall require appropriate watercourse, wetland, and riparian area buffers to protect water quality and biologic values.

Section 17.06.171 (B) (Removal of natural materials) of the City's Zoning Code address tree removal and states that the removal of trees shall occur in accordance with applicable sections of the California Forest Practices Act. If the Forest Practices Act is applicable, a Use Permit must be obtained from the planning commission prior to any removal of trees. The Project Area does not include forest resources; thus, the Forest Practices Act is not applicable.

The Project is consistent with the biological policies NCR-2.1, NCR-2.8, NCR-2.10, NCR-2.12, NCR-2.13, and NCR-15 in the City of Fortuna General Plan. No in-water work, culvert replacement or modification, or channel alteration within Mill Creek would occur. Primary construction activities would not occur within riparian corridors, and standard BMPs would be implemented to avoid indirect impacts associated with sedimentation and accidental spills. In addition, no upland ESHAs exist within the Project Area (Appendix G – Botanical Report). The only ESHAs were the delineated wetlands, which are addressed under Policy NCR-2.10 Wetland identification and Protection. See Section 3.4 – c) for discussion on potential wetland impacts.

A delineation of all potential aquatic resources within the Project Area was conducted (Appendix F – Wetland Delineation Report). Potential jurisdictional three-parameter wetlands, one-parameter wetlands, and Other Waters were documented in the Project Area. Mitigation Measures BIO-4 and BIO-5 require avoidance and minimization of permanent impacts and temporary impacts to wetlands during construction, appropriate buffers, restoration of pre-Project conditions at the conclusion of construction, and compensation of regulated wetlands, thereby reducing potential impacts to wetlands to a less-than-significant level, and therefor conforming to NCR-15.

There was no upland ESHA identified in the Project Area (Appendix G – Botanical Report). Within the Coastal Zone, a SNC characterized as a Shining willow grove Alliance comprised a portion of a potential one-parameter wetland, which are addressed under Policy NCR-2.10 Wetland identification and Protection. Any impacts to wetlands (and SNC) would be mitigated as required under Mitigation Measure BIO-4 and BIO-5.

Eel River Area Local Coastal Plan

The Eel River Area Local Coastal Plan (Humboldt County 2014) identifies land uses and standards by which development would be evaluated within the Coastal Zone. Applicable policies include:

– 3.41: Protection of Environmentally Sensitive Habitat Areas
  - 3.41 B: Wetland Identification and Development Policies
  - 3.41 F-4: Development and Uses within the Riparian Corridor
  - 3.41 F-5: Development and Uses within the Riparian Forest (located outside of the riparian corridor)
  - 3.41 F-6: Other Riparian Protection Measures

Mitigation Measures BIO-4 and BIO-5 require avoidance and minimization of permanent impacts and temporary impacts to wetlands during construction, restoration of pre-Project conditions at the conclusion of construction, and compensation of regulated wetlands, thereby reducing potential impacts to wetlands to a less-than-significant level. Mitigation is consistent with policies outlined in the Eel River Area Local Coastal Plan and the Project does not conflict with the biological policies defined therein.

Humboldt County

The Humboldt County General Plan does not apply inside the Coastal Zone.

The Open Space and Conservation Element of the Humboldt County General Plan (2017) summarizes policies germane to the protection of biological resources. Applicable policies include:

– BR-P1: Wetland Identification,
– BR-S10: Development Standards for Wetlands, and
– BR-S11: Wetlands Defined.

Policy BR-S10 established that development standards for wetlands shall be consistent with the standards for Streamside Management Areas (SMA). The SMA width applied to wetlands is designated as 50 feet for seasonal wetlands and 150 feet for perennial wetlands. The setback begins at the edge of the delineated wetland.

Humboldt County does regulate tree removal for trees larger than 12 inches in diameter that are in residential zones through a Special Permit. As all potential tree removal associated with the Project would occur outside a residential zone, Humboldt County's tree removal policy does not apply.

As the Project would obtain a Use Permit from Humboldt County for construction and operations to occur in eastern Project Areas, the Project would be required to be consistent with all applicable provisions of both the Eel River Area Local Coastal Plan and the Humboldt County General Plan as a condition of the permit.

The Project would obtain any necessary resource agency permits and would avoid and/or compensate for any impacts to wetlands and waters to ensure that no net loss occurs, ensuring adherence to City of Fortuna policies NCR-2.1, NCR-2.10, NCR-2.12, and NCR-2.13. No conflicts with policies or ordinances protecting biological resources have been identified. Therefore, the impact would be less than significant. The Project does not conflict with the biological policies in the Humboldt County General Plan.

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? (No Impact)

There are no adopted Habitat Conservation, Community Conservation, or approval local, regional, or state habitat conservation plans that apply to the Project Area. No impact would result.

3.5 Cultural Resources

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

The cultural resources study area is described as the Area of Potential Effect (APE). A Historic Property Survey Report (HPSR) and Archaeological Resources Study (ASR) were prepared for the project by DZC Archaeology & Cultural Resource Consulting (DZC 2022a, DZC 2022b). The studies assessed the potential for surficial and/or buried archaeological and historical resources in the proposed improvement area through the completion of the following:

– Records and literature search at the Northwest Information Center (NWIC) of the California Historical Resources Information Center (CHRIS);
– Further literature review of publications, files, and maps for ethnographic, historic-era, and prehistoric resources and background information;
– Communication with the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File and contact information for the appropriate tribal communities;
– Contact with the appropriate local Native American Tribes; and
– Pedestrian survey of the project area.

Study results were used as a technical basis for evaluating potential impacts to historic and cultural resources under CEQA.

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? (No Impact)

A Historic Property Survey Report was completed in August 2022 by DZC Archaeology & Cultural Resource Consulting (DZC 2022a). Two potential historic resources, properties or structures were identified within 0.25-mile of the Project APE. A segment of the Northwest Pacific Railroad/Eel River & Eureka Railroad was found to be exempt from the National Register of Historic Places (NRHP) and not considered a historic property. An abandoned alignment of US 101, also known as the Redwood Highway, was also found to be exempt from evaluation in the NRHP, and not considered a historic property. Based on the findings of the HPSR, there are no historic resources within the Project Area. Thus, no impact would result.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Less than Significant Impact with Mitigation)

An ASR was completed in August 2022 by DZC Archaeology & Cultural Resource Consulting (DZC 2022b). One previously recorded documented archaeological site was identified immediately adjacent to the APE and has not been evaluated by the NRHP. During the DZC site visit in 2021, the western half of the archaeological site appears relatively undisturbed since the flood in 1964, while the east side has incurred extensive mechanical impacts. They report that there is a sparse, but clear, surface component present. Subsurface depth, if any, is unknown. The resource is outside the APE; however, the potential for inadvertent discovery remains, resulting in a potentially significant impact. On- and off-site willow planting associated with mitigatory plantings would occur by hand labor only in limited locations and would not include deep excavation beyond 24 inches to accommodate planting. On- and off-site mitigation implementation would not result in a significant impact to archaeological resources.

Native American tribes and individuals and the NAHC were contacted by to discuss the proposed Project through the City's AB 52 consultation process (see Section 3.18 – Tribal Cultural Resources). Consultation between the City, the Bear River Band of the Rohnerville Rancheria, and the Wiyot Tribe, determined that a Tribal Cultural Resource Monitor would observe all ground disturbances within 1,000 feet of a prehistoric resource. This request has been incorporated into Mitigation Measures specific to cultural resources. Additionally, Caltrans District 1 qualified archaeological staff would complete an Extended Phase 1 archaeological investigation to confirm archaeological resources are protected from ground disturbance. The City would be required to implement recommendations resulting from the Extended Phase 1 investigation, if any, as included in Mitigation Measure CR-1. As a requirement under Section 106 of the National Historic Preservation Act, all cultural resource documents prepared for the Project, including required measures to protect archaeological resources, would be reviewed, and approved by the State Historic Preservation Officer prior to commencement of the Project. To ensure potential impacts to cultural resources remain less than significant, Mitigation Measure CR-1 would be implemented to establish protocols from DZC and Native American consultation, and Mitigation Measure CR-2 would be implemented for inadvertent archaeological discovery.

Mitigation

Implementation of Mitigation Measure CR-1 and Mitigation Measure CR-2 would reduce the potential impact to archaeological resources by requiring procedures that follow tribal consultation, and what shall occur in the event of inadvertent discovery

Mitigation Measure CR-1: Protect Archaeological or Tribal Cultural Resources during Construction

All recommendations resulting from the Extended Phase 1 investigation shall be implemented by the City prior to, during and following construction, as appropriate. The City shall document how Phase 1 each recommendation was implemented by recording the date, action taken, and responsible party.

Prior to the ground-disturbing construction activities (on the first day of work), construction personnel shall receive Cultural Resources Awareness Training to ensure that construction activities are conducted in a manner that is protective of known and unknown cultural resources. The training shall include information on the location and lateral extent of potential nearby cultural resources sites, avoidance of those areas, laws protecting such resources, and procedures for responding to inadvertent discovery situations. Avoidance of known cultural resources sites shall be determined

by a professional archaeologist or Native American monitor and include establishing a no-disturbance buffer zone around known resources.

Initial ground-disturbing activities near the previously recorded prehistoric resource shall be monitored by a Tribal Cultural Resource Monitor within 1,000 ft. If archaeological remains or potential tribal cultural resources are encountered during initial-ground disturbing activities, all work shall halt within a 50-foot radius of a discovery. Construction personnel shall not collect cultural materials. A qualified professional archaeologist shall be retained to evaluate the find, and the Tribal Cultural Resource Monitor shall be notified. If the find qualifies as a historical resource or unique archaeological resource as defined by CEQA, the archaeologist shall develop appropriate measures to protect the integrity of the resource in coordination with appropriate tribal representatives and ensure that no additional resources are affected. If the find qualifies as a tribal cultural resource as defined by CEQA, the City shall ensure that appropriate actions to protect the resource are taken and that no additional resources are affected.

Mitigation Measure CR-2: Inadvertent Discovery of Archaeological Material

If cultural materials for example: chipped or ground stone, historic debris, building foundations, or bone are discovered during ground-disturbance activities, work shall be stopped within 66 feet of the discovery, per the requirements of CEQA (Revised Guidelines, Title 14 CCR 15064.5 (f)). Work near the archaeological finds shall not resume until a professional archaeologist, who meets the Secretary of the Interior's Standards and Guidelines, has evaluated the materials, and offered recommendations for further action. Tribal representatives shall be notified.

Implementation of Mitigation Measure CR-1 and CR-2 would reduce the potential impacts to a less-than-significant level during construction because a plan would be implemented to address discovery of unanticipated archaeological resources and to preserve and/or record those resources consistent with appropriate laws and requirements.

c) Disturb any human remains, including those interred outside of formal cemeteries? (Less than Significant Impact with Mitigation)

While the Archaeological Survey Report did not determine archaeological resources were likely to be present within the APE, inadvertent discovery of human remains may still occur (DZC 2022b). In the event that human remains are encountered during construction, Mitigation Measure CR-3 would be implemented to ensure any potential impact would be less than significant.

Mitigation

Implementation of Mitigation Measure CR-3 would reduce the potential impact to archaeological resources or human remains by requiring procedures that shall be taken in the event of inadvertent discovery.

Mitigation Measure CR-3: Inadvertent Discovery of Human Remains

If human remains are discovered during project construction, work will stop at the discovery location, within 66 feet, and any nearby area reasonably suspected to overlie adjacent to human remains (PRC, Section 7050.5). The Humboldt County Coroner will be contacted to determine if the cause of death must be investigated. If the Coroner determines that the remains are of Native American origin, it is necessary to comply with State laws relating to the disposition of Native American burials, which fall within the jurisdiction of the NAHC (PRC, Section 5097). The Coroner will contact the NAHC. The descendants or most likely descendants of the deceased will be contacted, and work

will not resume until they have made a recommendation to the landowner or the person responsible for the excavation work for means of treatment and disposition, with appropriate dignity, of the human remains and any associated grave goods, as provided in PRC, Section 5097.98.

Implementation of Mitigation Measure CR-3 would reduce the potential impacts to a less-than-significant level during construction because a plan would be implemented to address discovery of unanticipated human remains and to preserve and/or record those resources consistent with appropriate laws and requirements.

3.6 Energy Resources

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

a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation? (Less than Significant with Mitigation)

Construction

Temporary energy use in connection with Project construction would entail consumption of diesel fuel and gasoline by construction equipment and by the transportation of earth moving equipment, construction materials, supplies, and construction personnel. Given the short construction period and implementation of State regulations regarding vehicle emission and fuels standards, such as the Low Carbon Fuel Standard and anti-idling regulations, energy use related to construction would not be wasteful or inefficient.

Inefficient construction-related fuels use would also be avoided due to the measures in Mitigation Measure AQ-1 (BMPs to Reduce Air Pollution). Equipment idling times would be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes or less (as required by Mitigation Measure AQ-1). Because construction would not encourage activities that would result in the use of large amounts of fuel and energy in a wasteful manner, and the incorporation of Mitigation Measure AQ-1 would reduce idling time, impacts related to the inefficient use of construction-related fuels would be less than significant with mitigation.

Operation

Operation of the Project would include periodic maintenance. These activities would generally be supported by vehicles and use of hand-held tools. The use of fossil-fuel powered equipment to support these operational and maintenance activities would be periodic and short-term (occurring intermittently). However, the potential need for larger repair and maintenance would remain the same as under existing conditions, as would the types of equipment and equipment use. These activities would not result in a substantial increase in energy use, and would not result in inefficient, wasteful, or unnecessary consumption of fuels or other energy resources.

Lighting enhancements would be installed to improve visibility for drivers during nighttime hours. As identified in Section 1.7, lighting for the Project would be the minimum lumens necessary. Lighting fixtures would be energy efficient, and as they are being installed for driver and pedestrian safety, would not be wasteful.

The Project would not result in an increase in vehicle trips, traffic volumes or increased delay over existing conditions. The proposed roadway improvements would likely increase multi-modal use of the roadway

which may decrease vehicle trips and associated fuel consumption. Traffic flow would improve; thus, the Project would result in less vehicle idling and an associated reduction in fuel consumption. Vehicle trips associated with operation and maintenance of the road would be the same as under existing conditions and would include annual inspections, repaving, painting, and repairs as needed. The Project would not result in an increase in operational energy consumption above existing conditions. Operation of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources; the impact would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (No Impact)

There are no local plans for renewable energy that would apply to the Project. Implementation of the Project would not obstruct a state plan for renewable energy. The Project would not conflict with or inhibit the implementation of the State Energy Action Plan, or other State regulations. The Project would not inefficiently utilize energy due to incorporation of Mitigation Measure AQ-1, which limits idling time and provides measures to protect air quality. The Project would temporarily require the use of equipment to construct the components of the Project; however, these activities would be temporary and would not interfere with the broader energy goals of the State. Operationally, the Project would not adversely impact operational automobile-related energy consumption. Project lighting would be limited and energy efficiency. The majority of California's energy-related plans are not directly applicable to the Project or its operations; however, the vehicles that would utilize the Project alignment would comply with plan requirements applicable to vehicles. The Project would therefore not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. No impact would result.

3.7 Geology and Soils

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?				✓
ii. Strong seismic ground shaking?			✓	
iii. Seismic related ground failure, including liquefaction?			✓	
iv. Landslides?			✓	
b) Result in substantial soil erosion or the loss of topsoil?			✓	
c) Be located on 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?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			✓	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

The Project is located on generally flat and gently sloping Eel River valley. Regional geology is likely influenced by seismic activity as a result of the relatively close proximity of the Mendocino Triple Junction to the Project. The Project is located near the Little Salmon Fault Zone (CGS 2022). The Project Area is predominantly comprised of Urban land-Friendlycity association with 0 to 2 percent slopes; two other soil associations that each cover less than 10% of the Project Area are listed in the Custom Soil Resource Report located within Appendix F of Appendix F.

a, 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. (No Impact)

According to the California Geological Survey (CGS), there are no Alquist Priolo Fault Zones in the Project Area (CGS 2022). The Project would have no impact with regard to the rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. The nearest fault zone is the Holocene-age Little Salmon Fault Zone approximately 1.7 miles east of the Project (CGS 2022). Project activities, which include shallow excavation and repaving, would not rupture faults in any known fault. Additionally, the Project does not include structures designed for human occupancy. No impact related to fault rupture would result.

a, ii) Strong seismic ground shaking? (Less Than Significant)

The Project is situated within a seismically active area close to several seismic sources capable of generating moderate to strong ground motions. Because the Project is located within a seismically active area, the probability that strong ground shaking associated with large magnitude earthquakes would occur during the design life of the Project is high. The Humboldt County coast is a highly active tectonic region that has been subjected to numerous earthquakes of low to moderate strength and occasionally to very strong earthquakes. Seismicity in the region is attributed primarily to the Mendocino Triple Junction, or the interaction between the Pacific, Gorda, and North American plates. Project implementation would not increase risk of strong seismic ground shaking above existing conditions.

Project implementation would not increase risk of strong seismic ground shaking or exposure to strong seismic ground shaking above existing conditions. If strong seismic ground shaking were to damage the proposed Project, it is unlikely that human lives would be put at risk because the Project does not involve the construction of habitable structures. The project would be designed and constructed in conformance with the site-specific recommendations contained in the geotechnical report prepared for the project, and any subsequent project-related geotechnical reports. The geotechnical report would reference California seismic requirements applicable to specific Project structural elements such as retaining walls. These recommendations would include, but not be limited to, reinforced road embankment, limited subdrainage elements, and slope toe protection. By following the recommendations contained in the geotechnical report, the construction and operation of the project would meet Caltrans standards and would result in a less than significant impact. Therefore, the impact to people and structures from strong seismic ground shaking would be less than significant.

a.iii, a.iv, c, d) Liquefaction, landslides, or otherwise unstable soils? (Less Than Significant Impact)

Liquefaction is a phenomenon involving loss of soil strength and resulting in fluid mobility through the soil. Liquefaction typically occurs when loose, uniformly sized, saturated sands or silts are subjected to repeated shaking in areas where the groundwater is less than 50 feet below ground surface. In addition to the necessary soil and groundwater conditions, the ground acceleration must be high enough, and the duration of the shaking must be sufficient, for liquefaction to occur. The Project is located in a mapped liquefaction hazard zone (Humboldt County 2022c). Project implementation would not increase risk of liquefaction or exposure to liquefaction above existing conditions and no impact would occur.

The Project Area includes embankments for the US 101 overpass. Beneath the overpass, a retaining wall (RW #1) would be constructed on the north side of Kenmar Road beneath the US 101 bridge to accommodate the entire width of the shared use path. A second retaining wall (RW #2) would be constructed on the south side of Kenmar Road just west of the US 101 undercrossing. A third retaining wall (RW #3) would be constructed along the northbound side of the Eel River Drive, which would span the length of the Fortuna Park and Ride lot. Retaining walls #1 and #2 would be combination of ground anchored and soil nail walls. Retaining wall #3 may differ slightly in the structure as it would be retaining a natural hillside rather than a highway bridge embankment. Retaining wall #3 would either consist of a soil nail retaining wall or a cantilevered soldier pile wall, which is a retaining wall constructed without ground anchoring and is embedded into the hillside. Further site assessments need to take place to determine the preferred construction and placement of RW #3. Thus, landslides within or near the Project are unlikely to occur, and the potential for landslide occurrence is not increased by the Project.

Expansive soils can cause considerable distress to roads and building foundations as they “rise-and-fall” in accordance with the cycles of soil wetting (swelling) and drying (shrinking). Soils with high percentages of silicate clays are those that have the potential for shrinking and swelling. Mapping by the NRCS shows the Project area to have the highest percentage of clay content ranging between 15 percent and 23 percent with Plasticity Index values of 8. Thus, those soils are considered to have a low to medium potential for expansion. Implementation of the Project would not exacerbate potential liquefaction or landslides, rather the potential for liquefaction or landslides would decrease.

The Project would comply with the seismic requirements of the Caltrans Highway Design Manual, 7th Edition (Caltrans 2020a). The Project would be designed and constructed in conformance with the site-specific recommendations contained in the geotechnical report prepared for the Project and any subsequent project-related geotechnical reports. Project adherence to the recommendations in the geotechnical report during construction and operation would result in a less than significant impact with mitigation in regard to landslide, lateral spreading, subsidence, or collapse.

b) Result in substantial soil erosion or the loss of topsoil? (Less Than Significant Impact)

Construction activities, including cut, fill, removal of vegetation, directional drilling, wetland mitigation (e.g., willow planting), and operation of heavy machinery would disturb soil and, therefore, have the potential to cause erosion. Erosion and sediment control provisions prescribed in the Fortuna Municipal Code, Humboldt County Code, and NCRWQCB regulations would be required as part of the Project. BMPs may include: silt fences, straw wattles, soil stabilization controls, site watering for controlling dust, and sediment detention basins. Environmental Protection Action 1 requires development and implementation of a SWPPP in accordance with the State General Construction Permit. These mandatory ordinance requirements and permits are designed to maintain potential water quality impacts at a less than significant level during and post construction. Therefore, the potential soil erosion impact would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (No Impact)

The Project does not propose the installation or modification of septic tanks or wastewater disposal systems. Therefore, construction and operation of the Project would have no impact.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less Than Significant with Mitigation)

Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under environmental legislation in California. Under California PRC § 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanor. State law also requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (PRC § 30244).

It is unlikely that Project construction would impact potentially significant paleontological resources because most of the Project occurs in relatively recently deposited alluvium or involves simply the disturbance of recently placed fill materials. However, the possibility of encountering a paleontological resource during construction cannot be completely discounted, therefore, the impact related to the potential disturbance or damage of previously undiscovered paleontological resources, if present, is considered potentially significant.

Mitigation

Implementation of Mitigation Measure GEO-1 would reduce the impact of construction activities on potentially unknown paleontological resources to a less-than-significant level by addressing discovery of unanticipated buried resources and preserving and/or recording those resources consistent with appropriate laws and requirements.

Mitigation Measure GEO-1: Inadvertent Discovery of Paleontological Resources

In the event that fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities shall be diverted away from the discovery within 50 feet of the find, and a professional paleontologist shall be notified to document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they will be properly curated and preserved.

Therefore, implementation of Mitigation Measure GEO-1 would reduce this impact to a less-than-significant level for both construction and operation because a plan to address discovery of unanticipated paleontological resources and to preserve and/or record those resources consistent with appropriate laws and requirements would be implemented.

3.8 Greenhouse Gas Emissions

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

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

NCUAQMD has not adopted regulations regarding the evaluation of greenhouse gas (GHG) emissions in a CEQA document and has not established CEQA significance criteria to determine the significance of impacts with regard to GHGs. The NCUAQMD has stated that they would not comment adversely on the use of thresholds of significance from the Bay Area Air Quality Management District (BAAQMD) for projects within Humboldt County. However, the BAAQMD has recently revised their adopted recommended CEQA thresholds of significance for GHG. The BAAQMD's Justification Report for the newly adopted greenhouse gas thresholds identify the thresholds as specific for 'development projects' of commercial/residential development and other projects. Per the Draft Justification Report:

> The Air District has developed these thresholds of significance based on typical residential and commercial land use projects and typical long-term communitywide planning documents such as general plans and similar long-range development plans. As such, these thresholds may not be appropriate for other types of projects that do not fit into the mold of a typical residential or commercial project or general plan update.
>
> Lead agencies should keep this point in mind when evaluating other types of projects. A lead agency does not necessarily need to use a threshold of significance if the analysis and justifications that were used to develop the threshold do not reflect the particular circumstances of the project under review. Accordingly, a lead agency should not use these thresholds if it is faced with a unique or unusual project for which the analyses supporting the thresholds as described in this report do not squarely apply. In such cases, the lead agency should develop an alternative approach that would be more appropriate for the particular project before it, considering all of the facts and circumstances of the project on a case-by-case basis. (emphasis added)

Additionally, the BAAQMD's Justification Report states:

> There is no proposed construction-related climate impact threshold at this time. Greenhouse gas emissions from construction represent a very small portion of a project's lifetime GHG emissions. The proposed thresholds for land use projects are designed to address operational GHG emissions which represent the vast majority of project GHG emissions. (BAAQMD 2022)

Therefore, as the BAAQMD and NCUAQMD do not have recommended thresholds of significance to apply to construction-period emissions or roadway/infrastructure projects, the Sacramento Metropolitan Air

Quality Management District's (SMAQMD) and South Coast Air Quality Management District's (SCAQMD) recommended GHG methodology and thresholds for construction impacts were applied. For project construction, SMAQMD has a threshold of 1,100 metric tons of carbon dioxide ($MTCO_2e$) per year threshold of significance (SMAQMD 2020). SCAQMD recommends a threshold of 1,100 $MTCO_2e$ applied to construction and operation; SCAQMD recommends that construction emissions be amortized over the life of the project, defined as 30 years, and added to the operational emissions for comparison against the threshold of significance.

In order to assess the potential impact of construction-generated emissions, the construction GHG emissions are annualized over an assumed 30-year project lifespan, added to operational emissions, and compared against a threshold of 1,100 $MTCO_2e$.

Project construction activities would result in exhaust emissions from on-road trucks, worker commute vehicles, and off-road heavy-duty equipment. Construction would require clearing, earthmoving, and delivery equipment, as used for similar Projects. Construction emissions were estimated using RCEM v.9.0.0 and were estimated to be approximately 1,336.49 $MTCO_2e$ from all construction activities, or 44.5 $MTCO_2e$ per year when annualized over the assumed 30-year lifespan of the Project. The Project is not capacity enhancing and would not result in an increase in vehicle trips. Additionally, improved traffic flow through the roundabouts would reduce vehicular idling and therefore result in a reduction in GHG emissions compared to existing conditions. Required maintenance of the Project would be similar to existing conditions. Therefore, the Project would not generate an increase in operation-related emissions.

Project emissions of 44.5 $MTCO_2e$ per year (annualized construction) would be less than the 1,100 $MTCO_2e$ threshold. Therefore, the Project's impact would be less than significant.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (No Impact)

The California Air Resource Board (CARB) 2017 Climate Change Scoping Plan provides California's climate policy portfolio and recommended strategies to put the State on a pathway to achieve the 2030 target. The scenario includes ongoing and statutorily required programs, continuing the Cap-and-Trade Program, and high-level objectives and goals to reduce GHGs across multiple economic sectors. Existing programs, also known as "known commitments," identified by the 2017 Climate Change Scoping Plan include: SB 350, the Low Carbon Fuel Standard, CARB's Mobile Source Strategy, SB 1383 for short-lived climate pollutants and California's Sustainable Freight Action Plan. The high-level objective and goals recommendations cover the energy, transportation, industry, water, waste management, agriculture, and natural and working lands, and are to be implemented by a variety of State agencies.

Project construction would cause a temporary increase in GHGs; however, as discussed above Project emissions would not exceed the identified emission thresholds. The Project is analyzed for consistency with the 2017 Climate Change Scoping Plan in Table 3.8-1 – Consistency Analysis Between Project and Climate Change Scoping Plan. As shown in the table, the Project is consistent with AB 32, as outlined in the 2017 Climate Change Scoping Plans. Therefore, the Project would not conflict with AB 32 or the 2017 Climate Change Scoping Plan and would result no impact.

Table 3.8-1 Consistency analysis between Project and Climate Change Scoping Plan.

Scoping Plan Reduction Measures	Consistency/Applicability Determination
California Cap-and-Trade Program Linked to Western Climate Initiative. Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.	**Not Applicable**. This is a statewide measure that cannot be implemented by the Project or lead agency.
California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel, and vehicle technology programs with long-term climate change goals.	**Consistent**. This is a statewide measure that cannot be implemented by the Project or lead agency. However, the standards would be applicable to the light-duty vehicles that would access the Project Area during construction and operation.
Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	**Not Applicable**. This is a measure for the state to increase its energy efficiency standards in new buildings. The Project would not result in new habitable buildings subject to the energy efficiency standards.
Renewable Portfolio Standard. Achieve 33 percent renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.	**Not Applicable**. This is a statewide measure that cannot be implemented by the Project or lead agency.
Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	**Consistent**. This is a statewide measure that cannot be implemented by the Project or lead agency. The standard would be applicable to the fuel used by vehicles that would access the Project Area during construction and operation.
Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.	**Not applicable.** This is a statewide measure calling for the development of GHG emission reduction targets.
Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	**Not applicable.** This is a statewide measure that cannot be implemented by the Project or lead agency.
Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	**Not applicable.** The Project does not propose any changes to modes of transportation of goods.

Scoping Plan Reduction Measures	Consistency/Applicability Determination
Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	**Not Applicable.** The Project does not involve structures with roofs.
Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	**Not applicable.** This is a statewide measure that cannot be implemented by the Project or lead agency.
Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost- effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.	**Not applicable.** This measure would apply to the direct GHG emissions at major industrial facilities. The Project is not industrial.
High Speed Rail. Support implementation of a high-speed rail system.	**Not applicable**. This is a statewide measure that cannot be implemented by the Project or lead agency. The Project does not involve a high-speed rail system.
Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	**Not Applicable**. This is a measure for the state to increase its energy efficiency standards in new buildings. The Project would not result in new habitable buildings subject to the energy efficiency standards.
High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	**Not Applicable**. The Project would not include air conditioners or commercial refrigerators.
Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	**Consistent.** The Project does not include a landfill. The Project would reduce construction waste with implementation of state mandated recycling and reuse mandates.
Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	**Not Applicable**. Although the Project is located in a rural setting, it would not adversely affect forestland. Additionally, the Project would not include areas suitable for reforestation. The Project would replant most native trees removed during construction.
Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	**Not Applicable**. The Project would not include an increase in water consumption or energy use associated with water treatment or transport.
Agriculture. In the near-term, encourage investment in manure digesters and at the five- year Scoping Plan update determine if the program should be made mandatory by 2020.	**Not applicable.** The Project does not include agricultural production.

Source of Scoping Plan Reduction Measures: CARB 2017

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?		✓		
e) For a project located within an airport land use 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?			✓	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			✓	

To evaluate the Project Area with respect to the presence and location of existing and/or historical soil and groundwater contamination, GHD completed an initial site assessment (ISA) and regulatory database review of available online government records (GHD 2022). The ISA was completed to identify areas of potentially impacted soil and/or groundwater within and near the Project Area that could potentially pose an exposure risk to humans and/or the environment during construction of the Project.

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Less Than Significant Impact)

Construction of the Project would include the transport and use of common hazardous materials inherent to the construction process, including petroleum products such as fuel and lubricants for construction equipment and vehicles, paints, concrete curing compounds, and solvents for construction of Project

improvements. These materials are commonly used during construction, are not acutely hazardous, and would be used in relatively small quantities.

Hazardous materials storage, handling, and transportation must comply with an interconnected matrix of local, state, and federal laws. Hazardous materials used during construction of the Project would be subject to applicable regulations, including California Health and Safety Code Section 25531, Division 20, Chapter 6.5, and other standards enforced by the various departments and boards under the California Environmental Protection Agency (Cal/EPA). The Project would be subject to Cal/EPA hazardous materials regulations consolidated under the state's Unified Program enforced by the Department of Toxic Substances Control (DTSC), the State Water Resources Control Board (SWRCB), North Coast Regional Water Quality Control Board (Regional Board), NCUAQMD, and the Department of Resources Recycling and Recovery (CalRecycle). The Cal/EPA administers the Unified Program via local Certified Unified Program Agencies (CUPAs). The CUPA for Humboldt County is the Humboldt County Division of Environmental Health (HCDEH). The HCDEH Hazardous Materials Unit has jurisdiction over the Project area and is tasked with local CUPA inspections and compliance. Project activities involving the transport, use, storage, and disposal of hazardous materials would be in accordance with established rules and regulations.

Worker exposure to hazardous materials is regulated by California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) and requires worker safety protections. Cal/OSHA enforces hazard communication regulations which require worker training and hazard information (signage/postings) compliance. In addition, hazard communication compliance includes procedures for identifying and labeling hazardous substances, communicating information related to hazardous substances storage, handling, and transportation; and preparation of health and safety plans to protect employees.

Project construction specifications would require the management of hazardous materials to comply with applicable laws, rules, and regulations. During Project construction, the contractor would be required to contain hazardous materials and avoid exposure to workers, the public, and surrounding environment during construction. An appropriate facility would be utilized for legal disposal of any hazardous materials generated.

Project construction would be required to implement stormwater management requirements during construction in accordance with the State Water Resources Control Board General Construction Storm Water Permit (Section 1.10 – Environmental Protection Action 1). Stormwater management requirements for addressing materials management would be required, including proper material delivery and storage, spill prevention and control, and management of concrete and other wastes, as described in Section 3.10 (Hydrology and Water Quality).

The established regulatory framework, BMPs, and requisite construction protocols provide appropriate risk mitigation and hazard protections, thus the Project would not create a significant hazard to the public or environment from hazardous materials. Because the City and its contractors would be required to comply with existing and future hazardous materials laws and regulations addressing the transport, storage, use, and disposal of hazardous materials, the potential to create a significant hazard to the public or the environment during Project construction would be less than significant.

Following construction, operation of the Project would require intermittent maintenance and repair, which could involve hazardous materials. The operational risk posed by intermittent maintenance and repair of the road specific to hazardous materials is low. The potential to create a significant hazard to the public or the environment during Project operation would be less than significant.

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?? (Less Than Significant Impact)

The Project would utilize heavy machinery to perform some construction-related tasks including grading, drilling, excavation, and transportation of materials. There is always the possibility when equipment is operating that an accident could occur, and fuel could be released onto the soil. Equipment on site during construction would be required to have emergency spill cleanup kits immediately accessible in the case of any fuel or oil spills. Equipment would not be refueled near the Eel River or any perennial wetland. If equipment must be washed, it would be washed off-site. The potential impact would be less than significant.

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

The Fortuna Junior Academy is located approximately 0.15 miles east, and the New Life Christian School is approximately 0.2 miles east of the Project. Construction activities are assumed to include the use of hazardous materials such as fuels, lubricants, degreasers, paints, and solvents. These materials are commonly used during construction, are not acutely hazardous, and would be used in small quantities. Numerous laws and regulations ensure the safe transportation, use, storage, and disposal of hazardous materials (see Impact discussion in Section 3.9 (a) and (b) above). Although construction activities could result in the inadvertent release of small quantities of hazardous substances, a spill or release at a construction area is not expected to endanger individuals at nearby schools given the nature of the materials, the small quantities that would be used, and the distance of the schools from the Project Area. Therefore, because the City and its contractors would be required to comply with existing and future hazardous materials laws and regulations covering the transport, use, and disposal of hazardous materials, and because of the nature and quantity of the hazardous materials to be potentially used by the Project, the impact related to the use of hazardous materials during construction adjacent to the schools would be less than significant. Project operations would have a less than significant impact on Fortuna Junior Academy, New Life Christian School, or any other school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Less Than Significant with Mitigation)

The Project Area is not located on, or within one mile of a site listed in the DTSC EnviroStor database (DTSC 2022). The Project is also not located on a cleanup site as mapped in the GeoTracker database, though there are sixteen closed sites within one mile of the Project, the closest being a Leaking Underground Storage Tank (LUST) approximately 0.3 miles north (Strong's Creek Lift, T0602300362) (SWRCB 2022). Off-site construction activities are not planned, and impacts related to these two off-site closed cleanup sites would not occur.

The ISA identified one Sites of Interest (SOI’s) with a hazard rank of 2 (remnant railroad corridor) within the immediate Project Area that may be contaminated. This SOI warrants subsequent pre-construction soil and groundwater sampling near the SOI. Additionally, this ISA identified the Project Area (hazard rank of 3) to potentially contain aerial deposited lead (ADL) located at roadway intersections where soil excavation and road widening to occur. Pre-construction sampling along the railroad corridor and Project Area for waste

characterization determines where excavation and or special handling activities are required. All other identified SOI's were classified a hazard rank value of 4 based upon proximity to the Project Area and groundwater flow direction (GHD 2022). Thus, the potential impact associated with hazardous materials sites would be potentially significant.

Mitigation

Implementation of Mitigation Measure HAZ-1 would reduce the impact of construction activities to ensure currently present hazardous materials do not inadvertently impact the public or environment.

Mitigation Measure HAZ-1: Inadvertent Discovery of Hazardous Soils

A Preliminary Site Investigation (PSI) will be required within the Project Area, including:

- Pre-characterization of soil and groundwater for potential CAM 17 Metals, TPHg, TPHd, and VOC impacts will happen prior to the start of construction activities, specifically at locations along the remnant railroad corridor anticipated to be impacted during Project construction activities.
- Pre-characterization for ADL in near surface soil will occur prior to initiation of construction activities, specifically at representative locations along the Project Area intersecting with Kenmar Road, Riverwalk Drive, Eel River Road, and US Highway 101 ramps. The ADL pre-characterization sampling will be conducted at discreet locations generally representative of soil conditions anticipated to be impacted during Project construction activities.

If construction activities include demolition of concrete infrastructure (bridges, overpasses, box culverts), a hazardous materials assessment will be completed to maintain compliance with National Emission Standard for Hazardous Air Pollutant (NESHAP) as promulged under 40 CFR Part 61 and/or 40 CFR Part 63.

If construction activities include dewatering, and if laboratory analysis of pre-construction soil borings indicate elevated total and STLC concentrations of ADL and CAM-17 Metals of 1,000 ppm and 5 mg/L, respectively, pre-construction characterization of groundwater will be required.

If sampled soil is found to be impacted by constituents of concern above established Solubility Threshold Limit Concentration (STLC) and/or Toxicity Characteristic Leaching Procedure (TCLP) thresholds applicable to roadway land uses (ADL, CAM-17 Metals, TPHg, TPHd, VOC's, etc.), preparation of a Construction Soil Groundwater Monitoring Plan (SGMP) and/or Lead Compliance Plan be required prior to any construction activities. The Construction SGMP and/or Lead Compliance Plan will proactively plan and manage potentially encountered hazardous materials affected soils throughout the Project Area. The SGMP and/or Lead Compliance Plan will identify protocols that will be utilized to proactively manage potentially impacted soil and groundwater within the Project Area and reduce exposure to site workers.

If pre-construction characterization indicates constituent of concern impacts above STLC levels to soil and/or groundwater, it is required that site workers involved in excavation activities be Hazardous Waste Operations and Emergency Response (HAZWOPER) trained (Occupational Safety and Health Administration [OSHA] 1910.120

Implementation of Mitigation Measure HAZ-1 would reduce this impact to a less-than-significant level for both construction and operation because a plan to address discovery of impacted hazardous soil would be enacted.

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? (Less Than Significant Impact)

The nearest airport is the Rohnerville Airport (KFOT), which is located approximately 1.3 miles southeast from the Project Area. The KFOT is covered by the 2021 Airport Land Use Compatibility Plan (ALUCP) prepared for the Humboldt County Airport Land Use Commission (ALUC) by ESA. Per the ALUCP, the Project Area is located within Safety Zone 6 of the Airport Influence Areas (AIA) (ESA 2021). However, no aspect of the project would result in an airport-related safety hazard for people residing or working in the project area. Therefore, a less than significant impact would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (No Impact)

The City does not have an independent emergency response plan. However, the City does have hazardous material response plans associated with the regulatory requirements for their wastewater treatment, water treatment plant facilities and operations, and an emergency response plan that establishes chain-of-command and response procedures between the emergency services, public works, City staff and board, and other essential departments and outside organizations. The proposed Project does not conflict with these plans.

The Humboldt County Emergency Operations Plan (Humboldt County 2015) does not designate specific evacuation routes or emergency shelter locations or include policies or procedures with which the Project would conflict. Therefore, the Project would not impair implementation of or physically interfere with the plan. Additionally, the Project would not increase public use, significantly increase risk of hazard occurrence, or construct facilities that may pose a hazard to people or the environment. No impact would occur.

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

Wildland fire is addressed in Section 3.20 (Wildfire). As noted in Section 3.20, the Project would not expose people or structures to a significant risk from wildland fires, thus a less than significant impact would result. Please see Section 3.20 for further discussion of the Project as it relates to wildland fire risks.

3.10 Hydrology and Water Quality

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

The Project is located in the Lower Eel River watershed, adjacent to Strongs Creek and the Eel River, and the Project Area contains portions of Mill Creek. Mill Creek originates on private timberlands and is a tributary to Strong's Creek which drains into the Eel River and ultimately into the Pacific Ocean. Mill Creek is considered a first order stream (CDFG 2004). The majority of the approximately 2.04-mile-long creek is within urban habitat, with a small portion of the headwaters in forested habitats (CDFG 2004). In-water work would not occur.

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? (Less Than Significant with Mitigation)

The Project is required to obtain and comply with necessary Clean Water Act permits requirements from the Regional Board and USACE, to ensure the Project does not violate any water quality standards or waste discharge requirements.

Construction activities such as site clearing, grading, excavation, and material stockpiling, placement of aggregate base, and related construction activities could leave soils exposed to rain or surface water runoff that may carry soil contaminants (e.g., nutrients or other pollutants) into waterways adjacent to the site, degrade water quality, and potentially violate water quality standards for specific chemicals, dissolved oxygen, suspended sediment, or nutrients to surface waters. The greatest potential Project impacts to water quality would result from sediment mobilization during construction. This impact is considered to be potentially significant without mitigation.

The proposed Project is anticipated to disturb over one (1) acre of land, therefore compliance with State Water Board Order No. 2009-0009 would be required which would regulate stormwater runoff from Project construction activities. Project operations would obtain coverage under State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, as amended by Order No. 2012-0006. In compliance with the National Pollutant Discharge Elimination System requirements, a Notice of Intent would be prepared and submitted to the North Coastal Regional Water Board prior to undertaking construction, providing notification and intent to comply with the State of California Construction General Permit (CGP). In addition, a SWPPP would be prepared for pollution prevention and control prior to initiating site construction activities.

The Construction SWPPP would be written by a Qualified SWPPP Developer (QSD); would identify and specify the use of best management practices (BMPs) erosion control, sediment control, off-site tracking control, wind erosion control, non-stormwater management control, and waste management and materials pollution control. A sampling and monitoring program would be included in the Construction SWPPP that meets the requirements of the CGP to ensure the BMPs are effective. A Qualified SWPPP Practitioner (QSP) would oversee implementation of the Plan, including visual inspections, sampling and analysis, and overall compliance with the SWPPP and CGP.

Implementation of Environmental Protection Action 1, combined with Mitigation Measures BIO-4 and BIO-5 would reduce potential water quality impacts during Project construction activities to a less-than-significant level by requiring measures to minimize erosion, sediment, and pollutant contribution to surface waters.

Following construction, operation and maintenance of the Project would not result in a new point discharge or a substantial increase in impervious surfaces relative to the surrounding area. Therefore, less than significant operational impact would result.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin? (No Impact)

The Project is located in the Eel River Valley Groundwater Basin 1-010, which has a SGMA Basin Priority of Medium and is not listed as Critically Overdrafted (DWR 2004). Contractor-supplied water would be used during construction for dust suppression on local roadways and work areas. Use of groundwater is not

anticipated for construction of the Project. Similarly, the Project would not decrease groundwater supplies or interfere with groundwater management. During roadway construction, isolated and short-duration groundwater dewatering may occur as needed and would be small in scale and limited to shallow groundwater only. The construction-related impact on groundwater levels would not result. Following construction, the Project would not utilize groundwater and would not result in an increase in population or employment that would indirectly increase groundwater demand. The Project would not alter groundwater recharge. Therefore, the Project would not create a deficit in aquifer volume or a lowering of water levels. Additionally, the amount of impervious surface created by the Project is minimal since the current road is paved, and the Project road would be consistent with the previous conditions in the area. The Project is not expected to result in any change in the use or recharge of groundwater. No construction or operational impact to groundwater resources would result.

c, i) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site? (Less Than Significant Impact)

The Project would add approximately 0.58 acres of impervious surfaces to the Project Area through the road realignment and paving, roundabout installation, and park and ride reconfiguration. Existing roadway drainage patterns would be maintained to the maximum extent practicable. Replacement, extension, or alteration of the Mill Creek channel or culvert along Kenmar Road would not occur. Excavation depths to install drainage facilities may vary but would typically be limited to six feet below existing grade. The Project design will include post-construction stormwater facilities to the degree required by the City's MS4 permit and Caltrans operational stormwater requirements.

Erosion and sediment prevention would be implemented during construction to avoid impacts to water quality, including those related to siltation (see impact "a", above). The Project would be required to adhere to BMPs and conditions to be included in a SWPPP and Clean Water Act Section 401 and 404 permits to prevent erosion-related impacts during construction. Substantial on- or off-site erosion and siltation would not result, and the potential construction-related impact with regard to erosion and siltation would be less than significant. Therefore, the impact would also be less than significant.

c, ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (No Impact)

The Project would have a net increase of approximately 0.58 acres impervious surface, though beneficial environmental impacts of the Project include neutral or better effect on existing local drainage, flooding, and implementation of stormwater design to contemporary standards to, or near, the Eel River, Strongs Creek, Mill Creek, or any other tributary. The Project would not alter topography or drainage patterns in a manner that would increase on- or off-site flooding. Aside from the increase impervious surface area, the Project does not include elements that would increase stormwater drainage or necessitate significant design features to accommodate stormwater management. New vegetated medians incorporated into the Project design and existing ruderal and forested open spaces bordering the roadway would support stormwater infiltration. Additionally, in compliance with Environmental Protection Action 1, the Project would develop a SWPPP to be approved by the NCRWCB, and the Project would be designed to meet NCRQWB storm water requirements. The Project would not cause on- or off-site flooding. The impact would be less than significant.

c, 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? (Less Than Significant)

The project would include new drainage facilities, including gutters, inlets, pipes, and rock energy dissipaters. Existing watershed drainage patterns would be maintained to the maximum extent practicable. Modification or alteration of the Mill Creek box culvert under Kenmar Road would not occur. The Project also does not include elements that would increase stormwater drainage or necessitate significant design features to accommodate stormwater management. Additionally, in compliance with Environmental Protection Action 1, the Project would develop a SWPPP to be approved by the NCRWCB, and the Project would be designed to meet NCRQWB storm water requirements. The Project would not cause on- or off-site flooding. The impact would be less than significant.

c, iv) Impede or redirect flood flows? (Less Than Significant)

The majority of the Project Area is located within the FEMA 100-year flood zone (Appendix F – Wetland Delineation Report). However, the Project design does not include any features that would impede or redirect flood flows. Existing topography would not be significantly altered in such a manner as to redirect flood flows. Any potential impact on the impediment or redirection of flood flows would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation? (Less Than Significant)

The majority of the Project Area is located within the FEMA 100-year flood zone (Appendix F – Wetland Delineation Report). Construction would not occur during flood conditions (see Section 1.7 – Construction Schedule). Thus, there would be no potential for a flood-related release of pollutants during construction. The Project does not include unsecured elements that could be washed away during a flood. Any potential construction related impact would be less than significant.

The Project Area is not located near a larger isolated body of water that may be affected by a seiche. The Project Area is not located within a tsunami hazard zone (Humboldt County 2022d). No impact from a seiche or tsunami would result.

Operational maintenance of the road may involve occasional repair, trash/debris removal, and vegetation maintenance (e.g., mowing), which could involve hazardous materials (e.g., small equipment fuel). However, these materials would not be stored within the Project Area and thus would not be released into the environment in the event of a flood event. Any potential operational related impact would be less than significant.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (No Impact)

The relevant water quality control plan is the NCRWQCB's Basin Plan which establishes thresholds for key water resource protection objectives for both surface waters and groundwater. The Project does not involve the use of groundwater resources and would not impact the quantity or quality of groundwater availability in the Eel River Valley Groundwater Basin.

The Project would be required to obtain coverage under SWRCB's Construction General Permit, which would include development and implementation of a SWPPP. The Project is also required to obtain and adhere to Clean Water Act Section 401 and Clean Water Act Section 404 permits (see Section 1.9 – Required Regulatory Permits). Adherence to these regulatory requirements and associated requisite monitoring would ensure a conflict with the Basin Plan does not occur.

The Project would meet and/or support the following Humboldt County General Plan Water Resource Element goals and policies that regulate hydrology and water quality during construction and operation of the Project: Storm Drainage (Policy WR-G10), Erosion and Sediment Discharge (Policy WR-P10), County Facilities Management (Policy WR-P11), Implementation of NPDES Permit (Policy WR-P35), Natural Stormwater Drainage Courses (Policy WR-P36), Erosion and Sediment Control Measures (Policy WR-P42), Storm Drainage Design Standards (Policy WR-P43), Storm Drainage Impact Reduction (Policy WR-P44), and Reduce Toxic Runoff (Policy WR-P45). It also would meet and/pr support the following City of Fortuna General Plan goals and policies that regulate water resources during construction and operation of the Project: Watershed Protection (Policy NCR-1.1), Stormwater Runoff (Policy NCR-1.5), Polluted Runoff (Policy NCR-1.6), and Clean Water Act Requirements (Policy NCR-1.8). No impact would result.

3.11 Land Use and Planning

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				✓
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

This section evaluates the potential impacts related to land use, as it applies to construction and operation of the Project. The Project spans the jurisdiction of both the City of Fortuna and Humboldt County.

a) Physically divide an established community? (No Impact)

The proposed Project would not divide an existing neighborhood or community. Rather, the Project would enhance community connectivity by promoting bicycle and pedestrian use and providing enhanced safety for all modes of transportation. Temporary detours would be required throughout construction. Temporary detours would follow City and Caltrans requirements for temporary roadway closures, including signage and public noticing. Construction would be phased in order to maintain local access to US 101. No impact would result.

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? (No Impact)

The Project Area is located partially within the city limits of Fortuna and partially within unincorporated Humboldt County. Portions of the Project Area are located in the Coastal Zone, including Riverwalk Drive and both southbound and northbound lanes of US 101 to the south of the interchange. This portion is within, and regulated by, the Eel River Area Local Coastal Plan of which Humboldt County has the primary permitting authority. The Project is located on both the Local and Appeal Zone jurisdiction of the Coastal Zone; thus, the Coastal Development Permit would be submitted to the Humboldt County Planning Department but subject to appeal by the State. Applicable land use plans covering the project area include the City of Fortuna General Plan, the Humboldt County General Plan, and the Eel River Area Local Coastal Plan.

The northwest of the Project Area (Fortuna jurisdiction) is zoned Freeway Commercial (FC), and the northeast is zoned Heavy Industrial (M-2) as sourced from the Fortuna General Plan. The southwest of the Project Area (County of Humboldt jurisdiction) is zoned Agriculture Exclusive, and the southeast is zoned Residential Agriculture.

The Project is consistent with the City of Fortuna and Humboldt County land use and zoning designations. The portion of the Project within the Coastal Zone would be subject to the requirements of a Coastal Development Permit, to be issued under the County of Humboldt via their Local Coastal Program. Therefore, the proposed Project would not conflict with any land use plan, policy, or regulation. No impact would result.

3.12 Mineral Resources

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			✓	
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?			✓	

This section evaluates the potential impacts related to mineral resources associated with the Project.

a, b) 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, or a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (Less than Significant)

The Project would require minor use of rock, gravel, sand, and other similar materials for construction, but is not expected to have any significant impact on locally available minerals or mineral resources valuable to the region or the State. Additionally, the Project Area is also not designated by the Humboldt County General Plan, or other local land use plan as having locally important mineral resources within the Project Area (Humboldt County 2017). The impact would be less than significant.

3.13 Noise

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓		
b) Result in generation of excessive groundborne vibration or noise levels?			✓	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

Current noise conditions on the Project Area consist of road noise associated with vehicles on US 101, Kenmar Road, Riverwalk Drive, and Eel River Drive, as well as recreational / residential noise from the Riverwalk RV Park. The nearest sensitive receptors are all located within the City of Fortuna's jurisdiction: the Riverwalk RV Park is immediately adjacent north of Riverwalk Drive, a residential home at 1325 Ross Hill Road is approximately 400 ft east of the southern extent of the Project Area, the Fortuna Junior Academy approximately 0.15 miles east of the eastern leg of Kenmar Road, and the New Life Christian School approximately 0.2 miles east of the southern extent of the Project Area. There are no sensitive receptors on Humboldt County land near the Project, as they are largely agricultural.

Noise Ordinance Compatibility

Applicable policies from the City of Fortuna and Humboldt County general plans are summarized below.

City Fortuna General Plan

Policy HS-4.7: Noise Barriers

The City shall consider the use of noise barriers (as a means of achieving the noise standards) only if all other practical design-related noise mitigation measures have been insufficient.

Policy HS-4.8: Noise Reduction/Design

The City shall lessen noise increases along the city's arterial and collector roads through project design of streets (including providing buffers to the extent feasible and screening), coordination of routing, and other traffic control measures.

Policy HS-6: Hours of Construction

The City shall limit the hours and days of major construction activities throughout the city to the hours between 7:00 a.m. to 8:00 p.m., Monday through Saturday, except for emergencies and other special permitted circumstances.

Policy HS-7: Noise Compatibility Standards by Land Use Type

The City shall adopt the noise compatibility standards by land use type identified in Tables 3.13-1 and 3.13-2.

Table 3.13-1 City of Fortuna General Plan Construction Noise Compatibility Standards

Zoning District	Maximum Noise Level (dBA L_{max})	
	Daytime Exterior (7:00 a.m. to 8:00 p.m.)	**Nighttime Exterior (8:00 p.m. to 7:00 a.m.)**
Residential	65	60
Hotels, motels, transient lodging	70	60
Schools, libraries, churches, hospitals, nursing homes	75	65
Commercial, office buildings	80	70
Industrial, manufacturing, agriculture	85	75

Table 3.13-2 City of Fortuna General Plan Traffic and Stationary Source Noise Compatibility Standards

Zoning District	Maximum Noise Level (dBA L_{max})	
	Daytime Exterior (7:00 a.m. to 8:00 p.m.)	**Nighttime Exterior (8:00 p.m. to 7:00 a.m.)**
Residential	45	60
Hotels, motels, transient lodging	45	60
Schools, libraries, churches, hospitals, nursing homes	45	60
Commercial, office buildings	50	70
Industrial, manufacturing, agriculture	60	75

Humboldt County General Plan

Policy N-P1: Minimize Noise from Stationary and Mobile Sources

Minimize stationary noise sources and noise emanating from temporary activities by applying appropriate standards for average and short-term noise levels during permit review and subsequent monitoring.

Policy N-P4: Protection from Excessive Noise

Protect persons from existing or future excessive levels of noise which interfere with sleep, communication, relaxation, health, or legally permitted use of property.

Policy N-S1: **Land Use/Noise Compatibility Matrix**

The Land Use/Noise Compatibility Standards (Table 3.13-1) shall be used as a guide to ensure compatibility of land uses. Development may occur in areas identified as “normally unacceptable” if

mitigation measures can reduce indoor noise levels to “Maximum Interior Noise Levels” and outdoor noise levels to the maximum “Normally Acceptable” value for the given Land Use Category.

Policy N-S4: Noise Study Requirements

When a discretionary project has the potential to generate noise levels in excess of Plan standards, a noise study together with acceptable plans to assure compliance with the standards shall be required. The noise study shall measure or model as appropriate, Community Noise Equivalent Level (CNEL) and Maximum Noise Level (Lmax) levels at property lines and, if feasible, receptor locations. Noise studies shall be prepared by qualified individuals using calibrated equipment under currently accepted professional standards and include an analysis of the characteristics of the project in relation to noise levels, all feasible mitigations, and projected noise impacts. The Noise Guidebook published by the U.S. Department of Housing and Urban Development, or its equivalent, shall be used to guide analysis and mitigation recommendations.

Policy N-S7: Short-term Noise Performance Standards (Lmax)

The following noise standards (Table 3.13-3), unless otherwise specifically indicated, shall apply to all property within their assigned noise zones and such standards shall constitute the maximum permissible noise level within the respective zones.

Table 3.13-3 Land Use/Noise Compatibility Standards

Land Use Category	Maximum Interior Exposure (Ldn1)	Land Use Interpretation for Day-Night Average Sound Level (Ldn) Value			
		Clearly Acceptable	Normally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential Single-Family, Duple, Mobile Homes	45	Under 55	55-60	60-75	Above 75
Residential-Multi-Family, Dormitories, etc.	45	Under 55	55-60	60-75	Above 75
Transient Lodging	45	Under 65	65-70	70-80	Above 80
School Classrooms, Libraries, Churches	45	Under 60	60-65	65-75	Above 75
Hospitals, Nursing Homes	45	Under 60	60-65	65-75	Above 75
Auditoriums, Concert Halls, Music Shells	35	Under 50	50-60	60-70	Above 70

Sports Arenas, Outdoor Spectator Sports	N/A	Under 60	60-65	65-75	Above 75
Playgrounds, Neighborhood Parks	N/A	Under 55	55-65	65-75	Above 75
Golf Courses, Riding Stables, Water Rec., Cemeteries	N/A	Under 60	60-70	70-80	Above 80
Office Buildings, Personal, Business, Professional	50	Under 65	65-75	75-80	Above 80
Commercial-Retail, Movie Theatres, Restaurants	50	Under 65	65-75	75-80	Above 80
Commercial-Wholesale, Some Retail, Ind. Mfg., Util.	N/A	Under 70	70-80	80-85	Above 85
Manufacturing Communications (Noise Sensitive)	N/A	Under 55	55-70	70-80	Above 80
Livestock Farming, Animal Breeding	N/A	Under 60	60-75	75-80	Above 80
Agriculture (except Livestock), Mining, Fishing	N/A	Under 75	Above 75	N/A	N/A
Public Right-of-Way	N/A	Under 75	75-85	Above 85	N/A
Extensive Natural Recreation Areas	N/A	Under 60	60-75	75-85	Above 85

Table 3.13-4 Short-term Noise Standards in L_{max}

SHORT-TERM NOISE STANDARDS (L_{max})		
Zoning Classification	Day (maximum) 6:00 a.m. to 10:00 p.m. dBA	Night (maximum) 10:00 p.m. to 6:00 a.m. dBA
MG, MC, AE, TPZ, TC, AG, FP, FR, MH	80	70
CN, MB, ML, RRA, CG, CR	75	65
C-1, C-2. C-3, RM, R-3, R-4	65	60
RS, R-1, R-2, NR	65	60

a) Result in 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? (Less Than Significant Impact)

Construction

Construction of the project would result in a temporary noise increase associated with the use of construction equipment. Construction is expected to require approximately 18 months to complete and would occur in 2025. Construction activities would be limited to daytime work hours between 7:00 a.m. to 7:00 p.m., Monday through Friday with occasional work on Saturdays. Construction noise levels would vary based on the type of equipment as summarized in Table 3.13-5 below.

Table 3.13-5 Construction Equipment Reference Noise Levels as Measured at 50'

Equipment	Noise Level (dB[1])	Equipment	Noise Level (dB)
Drill rig truck	84	Jackhammer	85
Horizontal Boring Hydraulic Jack	80	Large Generator	82
Front end loader or Backhoe	80	Paver or Roller	85
Excavator	85	Dump truck	84
Source: Federal Highway Administration, 2006			

Sound from a point source is known to attenuate at a rate of -6 dB for each doubling of the distance to the receptor. For example, a noise Equivalent Continuous Level (Leq) of 84 dB as measured at 50 feet from the noise source would attenuate to 78 dB Leq at 100 feet from the source and to 72 dB Leq at 200 feet from the source to the receptor. Based on the reference noise levels in Table 3.13-1, the noise levels generated by construction equipment at the Project site may reach a maximum of approximately 85 dB Leq at 50 feet during site excavation and construction.

[1] "dB" is a weighted decibel measurement for assessing hearing risk and, therefore, is used by most regulatory compliance.

City of Fortuna

City Policy HS-6 limits the hours of construction between 7:00 a.m. and 8:00 p.m., Monday through Saturday. Planned construction hours are consistent with the City of Fortuna Policy HS-6. City Policy HS-7 establishes construction noise standards that vary by land use (Table 3.13-1). Construction noise standards have been applied to the four sensitive receptors in proximity to the Project (Table 3.13-6) to evaluate consistency with City Policy HS-7.

Table 3.13-6 Estimated Construction Noise Levels at Sensitive Receptors

Sensitive Receptor	Proximity to Construction	Estimated Max. Noise Level (dB)	Consistent with City General Plan Policy HS-7?
Fortuna Junior Academy	0.15 east of east of the eastern leg of Kenmar Road	61dB	Yes
New Life Christian School	0.2 miles east of the southern extent of Project Area	58 dB	Yes
Residence at 1325 Ross Hill Road	Approx. 400 feet east of the southern extent of Project Area	67dB	Yes
Riverwalk Drive RV Park	Adjacent to construction on Riverwalk Drive		No (above the 70 dBA L_{max} limit)

The residential home approximately 400 ft east would experience approximately 67 dB. However, construction near the residence would be short-term in duration and, with BMP construction techniques, would be lower than the instantaneous maximum of 67 dB and consistent with the City's established 65 dBA Lmax under Policy HS-7. Thus, the average noise level expected at the residential home would be lower than the instantaneous maximum of 67 dB and consistent with the City's established 65 dBA L_{max} under Policy HS-7.

Though the Riverwalk RV Park is zoned Freeway Commercial, with a max of 80 dBA L_{max}, impact analysis applies the more conservative hotels, motels, transient lodging threshold 70 dBA L_{max} due to the RV Park's functional use. The Riverwalk RV Park is immediately adjacent to the Project Area; therefore, reference noises from Table 3.13-1 are not diminished by distance. These impacts are potentially significant to occupants of the Riverwalk RV Park nearest Riverwalk Drive and the US 101 southbound offramp during periods when construction is occurring near the property. To reduce this potential impact to a less than significant level, Mitigation Measure NOI-1 has been incorporated into the Project.

Mitigation

Implementation of Mitigation Measure NOI-1 would reduce the impact of construction activities to ensure noise does not inadvertently impact the public or the environment.

Mitigation Measure NOI-1: Reduce Construction Noise Levels

The City and its contractor shall implement best management practices to reduce construction noise levels emanating from construction activities and minimize disruption and annoyance at the Riverwalk Drive RV Park. Specific measures that can be feasibly implemented to include, but are not limited to, the following:

- Provide advance notice to nearby residents and those within the Riverwalk Drive RV Park within 250 feet prior to starting work, with information regarding anticipated schedule, hours of operation and a project contact person.
- Best available noise control practices (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) shall be used for equipment and trucks to minimize construction noise impacts.
- Stationary noise sources shall be located as far from sensitive noise receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used. Enclosure openings or venting shall face away from sensitive noise receptors.
- Schedule work and deliveries to minimize noise-generating activities near the Riverwalk Drive RV Park.

With implementation of Mitigation Measure NOI-1, construction noise levels would be reduced to a less-than-significant level.

Humboldt County

Short-term noise performance standards during daytime hours for Humboldt County range from a maximum of 65 dB – 85 dB, depending on the land use. Land uses are predominantly undeveloped agricultural areas adjacent to Riverwalk Drive, on the margin of the project boundary and US 10. Humboldt County provides exceptions to construction-related noise limits, which include the use of heavy machinery and tools used during construction of permitted structures when conforming to the terms of the approved permit (Humboldt County 2017). The Project would be fully permitted and would comply with terms of approved permits, including those that specifically address noise limitations. The Project would not conflict with Humboldt County's General Plan Noise Element and a construction-related impact associated noise impact within the jurisdiction of the Humboldt County would not result. There would be no impact.

Operation

City of Fortuna

City Policy HS-4.7 allows the use of noise barriers only if all other practical design-related noise mitigation measure have been insufficient. The Project does not result in an operational noise impact. Therefore, a noise barrier is not required.

City Policy HS-4.8 requires strategies to lessen noise along arterial and collector roads through project design elements, such as buffers. The Project's design does include an enhanced sidewalk between Riverwalk Drive and the Riverwalk Drive RV park. Additionally, operational noise near the Riverwalk Drive RV Park is expected to decrease due to a quieter, smoother roadway surface. The proposed roundabout would further decrease operational noise by reducing the amount of acceleration and braking associated with stopping, turning, and reaccelerating at the current intersection, including near Riverwalk Drive RV Park. Therefore, the Project is consistent with City Policy HS-4.8.

City Policy HS-7 establishes operational noise standards that vary by land use (Table 3.13-2). The Project would reduce operational noise as a result of a quieter, smoother roadway and reduced breaking / acceleration. Therefore, there Project is consistent with City Policy HS-7.

Given the Project is consistent with the City's operational noise-related General Plan policies and would not increase operational noise in the vicinity of sensitive receptors, any potential impact would be less than significant.

Humboldt County

The Humboldt County General Plan includes Policy N-S1, which specifies that the Land Use/Noise Compatibility Standards shall be used as a guide to ensure compatibility of land uses. Once the Project is constructed, users would not generate a significant amount of noise in excess County standards. Noise associated with the operation of the road would be generally consistent with the previous conditions, in fact the associated noise would be reduced due to the roundabouts limiting stop-and-go engine noise. Therefore, Project operation would not result in noise levels exceeding the County's noise standards for public right of way land uses and would not generate a substantial temporary, or permanent, increase in ambient noise levels in the vicinity of the Project. A less than significant impact would result.

b) Result in generation of excessive groundborne vibration or noise levels? (Less Than Significant Impact)

The City and County have not established vibration limits to minimize the potential for cosmetic damage to buildings. However, Caltrans recommends a vibration limit of 0.5 inches/second peak particle velocity (PPV) for buildings structurally sound and designed to modern engineering standards, 0.3 inches/second PPV for buildings that are found to be structurally sound but where structural damage is a major concern, and a conservative limit of 0.08 inches/second PPV for ancient buildings or buildings that are documented to be structurally weakened. No known buildings that are documented to be structurally weakened or ancient adjoin the Project Area. Therefore, the 0.5 inches/second PPV limit would apply when considering the potential for groundborne vibration levels to result in a significant vibration impact.

The noise and vibration evaluation assessed typical vibration levels that could be expected from construction equipment at a distance of 25 feet, inclusive of required equipment and methods for all four potential construction options. Project construction activities, such as drilling, the use of jackhammers, and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity.

Table 3.13-7 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet (Caltrans 2020). High-power or vibratory tools and rolling stock equipment (e.g., tracked vehicles, compactors), may generate substantial vibration in the immediate vicinity. Vibratory rollers typically generate vibration levels of 0.210 inches/second PPV at a distance of 25 feet. Vibration levels are highest close to the source and attenuate with increasing distance. Vibration levels would vary depending on soil conditions, construction methods, and equipment used.

Table 3.13-7 Typical vibration levels for construction equipment used during Project construction (Caltrans 2020).

Equipment	Reference PPV at 25 ft. (in/sec)
Vibratory Roller	0.210
Large Bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003
Crack-and-seat operations (specific pavement rehabilitation process)	2.4

Project-related activities would not involve the use of explosives or other intensive construction techniques that could generate significant ground borne vibration or noise. The Project may also utilize a vibratory roller, large bulldozer, and jackhammer.

The proposed Project would comply with Fortuna General Plan Policy HS-6 and Humboldt County General Plan policy N-IM6, which requires limiting construction activity to specified daytime hours and regulate vibration sources.

Vibration impacts to residences are anticipated to be minor as the closest residences are located approximately 400 feet away from the Project Area. Minor vibration adjacent to mechanized equipment and road treatments during construction work would be generated only on a short-term basis. Therefore, groundborne vibration and noise would have a less than significant impact.

Following construction, operation of the Project would not result in groundborne vibration or groundborne noise consistent with current use. Project operation would not generate vibration, except in instances where larger repairs to the road might be required. These conditions would be short-term and temporary (taking from one to several weeks to complete depending on the extent of damage or other circumstances); therefore, no operational impact would result.

The proposed Project would comply with Fortuna General Plan Policy HS-6 and Humboldt County General Plan policy N-IM6, which requires limiting construction activity to specified daytime hours and regulate vibration sources

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? (No Impact)

The nearest airport is the Rohnerville Airport (KFOT), which is located approximately 1.3 miles southeast from the Project Area. The KFOT is covered by the 2021 Airport Land Use Compatibility Plan (ALUCP) prepared for the Humboldt County Airport Land Use Commission (ALUC) by ESA. The Project is not located within the ALUCP Noise Contours for KFOT (ESA 2021). Therefore, Project construction would not exacerbate existing airport noise. No impact would result.

3.14 Population and Housing

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

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)? (No Impact)

The key elements of the Project are the addition of the two roundabouts and the reconfiguration of the US 101 ramps to enhance traffic operations and safety. New shared use paths, and curb ramps would be constructed on the north side of Kenmar Road, providing improved pedestrian and bicycle safety and enhanced connectivity to the opposite side of US 101. The Park and Ride would also be reconfigured, though the total number of parking spaces would not be changed.

The project does not include the construction of new homes or businesses in the area. The project would not indirectly induce population growth because it would not extend infrastructure into new areas not already served by the communities of Fortuna. It would not result in the extension of utilities or roads or other infrastructure into outlying areas and would not directly or indirectly lead to the development of new sites that would induce population growth. In addition, implementation of the project would not result in a direct or indirect increase in employment opportunities that could lead to an increase in the local population. No impact would result.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (No Impact)

The proposed Project would not displace people or housing or otherwise effect housing because there is no housing located in the immediate vicinity of the Project Area and the Project does not include modification or construction of housing. No impact would result.

3.15 Public Services

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

The Project would result in an overall benefit to public services by improving traffic safety for vehicles, bicycles, and pedestrians within the Project Area.

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public services? (No Impact)

While the Project would alter Kenmar Road with the addition of two roundabouts, such actions would not increase the need for additional public services in the Project Area. This would enhance public service capabilities in the surrounding area by enhancing connectivity and safety. The Project Area currently receives fire protection services from the Fortuna Volunteer Fire Department consistent with the rest of Fortuna. The Project would not result in the need to increase staffing, create new hazardous conditions, or result in a modification to the road system that would restrict access for emergency services. The Project would not result in an increase in student population, and therefore, no new or expanded schools would be required. The Project would not necessitate any related new or altered public service facilities. Overall, there would be no impact.

3.16 Recreation

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				✓

Recreational facilities near the Project Area include the Riverwalk RV Park, Riverwalk Trail, and the Fortuna Dog Park.

a) 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? (Less Than Significant Impact)

The proposed Project would create new shared use paths to enhance safety for all transit, including pedestrian and bicycle. Any minimal increases in pedestrian and bicycle use would be attributed to a reduction in vehicle use due to the shared use paths increasing accessibility. The Fortuna Park and Ride, though not a recreational point itself, can be utilized for carpooling to recreation. The existing Fortuna Park and Ride would be reconfigured, though the total number of parking spaces would remain the same at 18. The Fortuna Dog Park is an established park located near the northern terminus of the River Walk Trail and north of the Project. The Riverwalk RV Park, which hosts RV and tent camping, pool, spa, and a barbeque area, is directly adjacent to the Project; right-of-way acquisition of a small portion of the Riverwalk RV park would not affect or diminish use of the facility for recreational purposes. Because the Project would not increase residential uses in the vicinity of the Project, the Park and Ride, Fortuna Dog Park, River Walk Trail, and Riverwalk RV Park would not experience an increase in usage as a result of the Project. There would be a less than significant impact.

b) Include or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (No Impact)

The construction or expansion of recreational facilities would not be required by the Project or included in the Project. There would be no impact.

3.17 Transportation

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

The Project consists of the installation of two roundabouts and the installation of new shared use paths. Both travel lanes of Kenmar Road on either side of US 101 would be realigned and widened as necessary to support the new roundabouts.

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? (No Impact)

Transportation Ordinance Compatibility

City of Fortuna General Plan

Goal TC-1: Roadways & Highways

To develop a safe, convenient, and uncongested road network.

Policy TC-1.1: Reducing Mode Conflicts.

The City shall seek to minimize conflicts between pedestrians, automobiles, and bicycles.

Policy TC-1.3: Balanced Transportation System.

The City shall strive to meet the LOS standards through a balanced transportation system that provides alternatives to the automobile and by promoting pedestrian, bicycle, and transit connections between employment areas and major residential and commercial areas.

Goal TC-4: Pedestrian Facilities

To develop safe and pleasant pedestrian ways that provide recreation opportunities as well as alternatives to the automobile.

Program TC-13:

The City shall create and maintain a comprehensive list of specific corridors throughout Fortuna in need of sidewalks. This list should include, but not be limited to:

– Kenmar Road from Fortuna Boulevard westerly to Riverwalk Drive;

– Riverwalk Drive easterly from existing improvements to Kenmar Road;

Goal TC-5: Bicycle and Trail Facilities

To provide an interconnected and effective system of bikeways, bicycle parking facilities, and trails for people wishing to walk or bicycle for commuting and/or recreational trips.

Policy TC-5.4: Bicyclists' Needs. The City shall consider bicyclist needs in new roadways construction and existing roadway upgrades

Policy TC-5.6 Bicycle and Pedestrian Linkages.

The City shall seek opportunities to strengthen and expand bicycle and pedestrian linkages across US 101.

The Project would install two roundabouts and new shared use paths for pedestrians and bicycles. These activities do not conflict with a circulation-related program plan, ordinance, or policy of the City of Fortuna. In fact, they are in line with the City's to develop pedestrian and bicycle connectivity on Kenmar Road.

Humboldt County General Plan:

Policy C-P5. Level of Service Criteria.

The County shall strive to maintain Level of Service C operation on all roadway segments and intersections, except for US 101, where Level of Service D shall be acceptable. Level of Service improvements for automobiles should not adversely affect Level of Service and/or Quality of Service for other modes of transportation, if possible.

Policy C-P17. Highway Improvements.

Encourage state and federal highway improvements that promote safety and connectivity for all users, especially for communities with highway arterials. The County supports a strategy for safety and operational improvements to the US 101 Safety Corridor that is implemented in a manner consistent with the General Plan.

The existing northbound and southbound off-ramps and on-ramps would be realigned to support the new roundabout configuration proposed for either side of US 101. These activities do not conflict with any of the goals or policies contained in the Humboldt County General Plan Circulation Element. In addition, the Humboldt County Association of Governments regional bike plan lists Kenmar Road as a proposed Class II bike path, and the Project would not conflict with this.

The Project Area would be accessed via Riverwalk Drive, Kenmar Road, and US 101. Temporary detours roads and temporary traffic control would be required throughout construction which would follow City and Caltrans requirements for temporary roadway closures, including signage and public noticing. No impact would occur.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? (Less Than Significant Impact)

Pursuant to SB 743 and the current CEQA Guidelines, evaluation of a project's potential transportation impact requires consideration of vehicle miles traveled (VMT), which refers to the amount and distance of automobile travel attributable to a project. Section 15064.3, subdivision (b), of the CEQA Guidelines lists the criteria for analyzing transportation impacts from proposed projects. The criteria are broken into four categories, including land use projects, transportation projects, qualitative analysis, and methodology. Transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less than

significant transportation impact. This section was recently added by the state legislature in an attempt to separate CEQA's purpose and role from traffic or other issues related to ease of use of single occupancy vehicles.

Examples of projects that result in the potential to increase VMT include:

– Changes in land use
– Expanded roadways (e.g., new roads, additional lanes)
– Private development
– Expanded public service facilities, such as new police stations, new fire stations, or new administrative buildings
– Residential development, such as a new sub-division

The proposed Project includes none of the above listed elements, as it would be installing two roundabouts to the existing roadway and does not include any component that could be characterized as resulting in a potential increase to VMT. Per the California Office of Planning and Research's guidelines for evaluating transportation impacts in CEQA, for roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements (OPR 2019).

Other applicable considerations in the OPR guidance note the criteria for determining the significance to transportation impacts must promote the development of multimodal transportation networks. This Project would restore access to safe pedestrian use, including walking a biking, by repairing the road and road shoulder.

Because the proposed Project would not increase the length of roadway, add new roadways, or increase the number of travel lanes outside of historic conditions, there would be no increase in VMT. The impact would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (No Impact)

The Project would change the geometry of the of the existing northbound and southbound off-ramps and on-ramps of US 101 to support the new roundabout configuration proposed. The geometry along Kenmar Road would also be minimally adjusted for the two roundabouts. These adjustments would minimize sharp curves entering the roundabouts and would enhance safety within the Project Area.

The Project is being designed in accordance with the Caltrans Highway Design Manual, 7th Edition (2020) and the National Cooperative Highway Research Program (NCHRP) Report 672 entitled "Roundabouts: An Information Guide, 2nd Edition". In addition, the Project would be designed in accordance with other specific applicable standards, including the California Manual on Uniform Traffic Control Devices (Caltrans 2021); the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design; the 2019 California Building Code and portions of the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets, 7th Edition (2018). No impact would result.

d) Result in inadequate emergency access? (Less Than Significant with Mitigation)

The Project would involve modification to Kenmar road, a principal arterial road within the City of Fortuna (City of Fortuna 2010). Principal Arterial roadways emphasize mobility with limited access. These include freeways, expressways, and those arterials specifically designed to provide a high level of mobility with limited access to adjoining properties. Emergency access to the Project Area already exists and would continue to exist under the proposed Project during both construction and operation. Temporary detours would be required throughout construction which would follow City and Caltrans requirements for temporary roadway closures, including signage and public noticing. Construction would be phased in order to maintain local access to US 101, though lane and/or roadway closures could result in delays for emergency response vehicles.

Since the Project Area is already served by emergency and law enforcement personnel, the proposed Project would not slow or hinder emergency response, would not require additional emergency services, though emergency access though lane and/or roadway closures could result in delays during construction. Following construction, the surrounding area would continue to have emergency access. No operational impact on emergency access would result. The construction impact could be potentially significant. Mitigation Measure TR-1 has been incorporated into the Project to reduce the potential impact to emergency access to a less than significant level.

Mitigation

Mitigation Measure TR-1 would reduce the temporary impact of construction activities on emergency access to a less than significant level by requiring the City and its contractors to have ready at all times the means necessary to accommodate access by emergency vehicles, as well as to notify emergency responders in advance of construction activities.

> **Mitigation Measure TR-1: Maintain Emergency Access and Notify Emergency Responders**
>
> The City shall require contractors to provide adequate emergency access to all properties along the corridor during the construction process. At locations where the access to a nearby property is temporarily blocked, the contractor shall be required to have ready the means necessary to accommodate access by emergency vehicles to such properties, such as plating over excavations. As construction progresses, emergency providers shall be notified in advance of the timing, location, and duration of construction activities and the locations and durations of any temporary lane closures.

With implementation of Mitigation Measure TR-1, any potential impact to emergency access during construction would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k)?		✓		
b) Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.		✓		

a, b) Cause a substantial adverse change in the significance of a tribal cultural resource? (Less Than Significant with Mitigation)

CEQA requires lead agencies to determine if a proposed Project would have a significant effect on tribal cultural resources. The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American tribe.

Under Assembly Bill (AB) 52, notification letters were sent to the Bear River Band of the Rohnerville Rancheria and the Wiyot Tribe on June 24, 2022. The Bear River Band of the Rohnerville Rancheria responded on July 8, 2022, with a request to have a cultural monitor on-site during the ground disturbing activities of this project, within 1,000 ft of recorded resources. No specific tribal cultural resources were identified within the APE, but the area is known to be culturally sensitive (DZC 2022b), resulting in a potentially significant impact to tribal cultural resources. Implementation of Mitigation Measures CR-1, CR-2, and CR-3 (see Section 3.5 – Cultural Resources) would reduce the potential impact to tribal cultural resources to a less than significant level.

3.19 Utilities and Service Systems

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

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? (Less than Significant Impact)

The following is a preliminary list of utilities within the construction limits:

– Natural Gas
– Overhead and Underground Electric
– Overhead and Underground Communications
– Potable Water
– Storm Drainage

The project involves the installation of two roundabouts on Kenmar Road. Both travel lanes of Kenmar Road on either side of US 101 would be realigned and widened as necessary to support the new roundabouts. This would require relocations of both above and below ground utilities that conflict with work. This Project does not involve the construction of new water, electrical, natural gas, or telecommunications infrastructure/facilities. A less than significant result would occur.

b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years? (No Impact)

The proposed Project would not create an increased demand for domestic water service. The Project would require relatively small quantities of water during the construction phase (e.g., for dust control and concrete/asphalt applications). The Project's water demands would not be substantial and can be met by existing entitlements and resources. The Project would not induce population growth or result in land uses that would increase demand for water supplies. Therefore, the Project would not result in the need for the construction of new water facilities, or the expansion of existing facilities. No impact would result.

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? (Less than Significant Impact)

The Project does not involve sewerage facilities or wastewater treatment and would not result in a demand increase on existing wastewater treatment capacity. The project would potentially require minor relocations of existing municipal sewerage covers to final grade during construction, but it would not significantly impact existing municipal sewerage infrastructure. A less than significant impact would result.

d, e) 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? (Less Than Significant)

The solid waste providers in the area are Recology Eel River (Recology) and the Humboldt Waste Management Authority (HWMA). The Project is not expected to generate a significant increase of services for solid waste disposal needs. The proposed Project would generate limited solid waste during construction and no waste during operation. Construction solid waste would include the one-time temporary generation of construction waste associated with the proposed construction. Excess soils, aggregate road base, RSP, and construction materials would be stored within designated staging areas. Excess materials may be re-used on site for backfill and finished grading. Excess materials would not be stockpiled on-site once the project is complete. The contractor would haul additional excess materials off site for beneficial re-use, recycling, or legal disposal. Solid waste collected as a part of the Project would be disposed of via Recology or HWMA. Solid waste produced in the County is trucked to State licensed landfills located in Anderson, California and Medford, Oregon in compliance with local, State, and federal regulations pertaining to solid waste disposal. These facilities have sufficient capacity to serve the Project's solid waste disposal needs; therefore, a less than significant impact is anticipated

3.20 Wildfire

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			✓	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✓
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slop instability, or drainage changes?			✓	

This section evaluates potential impacts related to wildfire risk; no portion of the Project Area is located within or near a State Responsibility Area (SRA) where Cal Fire is the primary emergency response agency responsible for fire suppression and prevention. The Project is located approximately 0.9 mile from the nearest SRA. Therefore, the CEQA Guidelines Appendix G Checklist section for wildfire is not applicable to the Project, but the section below is provided for additional context. The Project is located within a Local Responsibility Area (LRA) rated as either unzoned or moderate Fire Hazard Severity Zone (FHSZ) (Humboldt County 2022e, CAL FIRE 2007). There are no very high fire hazard severity zones within the LRA. Fortuna Volunteer Fire Department serves the Project Area located within the LRA. The nearest land classified as a very high fire hazard severity zone is approximately 1 mile east of the Project Area (CAL FIRE 2007).

The closest fire station to the Project Area is the Campton Heights Station located approximately 0.8 mile southeast of the Project, and the Fortuna Fire Station located approximately 1.0 mile north.

a) Substantially impair an adopted emergency response plan or emergency evacuation plan (No Impact)

A review of the Humboldt County EOP (Humboldt County 2015) and the Tsunami Inundation Map for Emergency Planning – County of Humboldt (CGS 2021) indicates that the Project would not permanently impair emergency response activities nor established evacuation routes. The Project operation would not impair implementation or physically interfere with an established emergency response or evacuation plan; see Section 3.9 (Hazards and Hazardous Materials, Impact (f)) for discussion of the Project's effect on emergency response and evacuation plans.) Once constructed, the Project would enhance transportation safety along Kenmar Road, thus emergency response or evacuation would not be impeded. The Project

would not permanently impede access to any existing roads or pedestrian ways within the Project Area. No impact would result.

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? (Less than Significant Impact)

The Project Area includes topography that is relatively flat and where windy conditions are common. Fire ignition risk associated with construction activities is low and limited to accidental ignition associated with a potential heavy machinery-related incident. The majority of work is planned to occur within paved areas, further reducing the potential for fire ignition. The Project would not otherwise increase exposure to wildlife fire above existing conditions. The impact would be less than significant.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (No Impact)

Development of the Project would not result in a need to expand infrastructure to the Project Area or in the immediate vicinity of the Project. New roads for fire defense, expanded water sources, or new power lines would not be required. No impact would result.

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? (Less than Significant Impact)

Project construction would not expose people or structures to significant risk. The Project is located in the low-lying, generally flat developed lands adjacent to the Eel River. The immediate Project Area is not forested, although some vegetation is present. Fire ignition risk associated with construction activities is low. Because the Project is located in flat lands and due to low fire ignition risk, the risk of flooding or landslides associated with post-fire slope instability or changes in drainage is low. The impact is less than significant.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less-than-Significant w/ Mitigation Incorporated	Less-than-Significant Impact	No Impact
Does the project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			✓	
c) Have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?			✓	

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Less Than Significant with Mitigation)

As evaluated in this IS/MND, the Project would not substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory

Mitigation measures are listed herein to reduce impacts related to Air Quality, Biological resources, Cultural Resources, Energy Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Tribal Cultural Resources. With implementation of the required mitigation measures, impacts would be less than significant.

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)? (Less than Significant)

Cumulative impacts are defined as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines § 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Table 3.21-1 provides a list of past, present, and reasonably foreseeable future projects within and near the Project Area, including their anticipated construction schedules (if known). Efforts to identify cumulative projects included outreach to the Humboldt County Planning and Building Department, Humboldt County Department of Public Works, Caltrans, and the City of Fortuna.

Table 3.21-1 Cumulative Projects Summary

Agency	Project	Construction Year	In-Water Work?
Caltrans	Construct Materials Lab	2023	No
Caltrans	Fortuna Median Paving/Fortuna Median Roadside Safety Project	2026	No
Caltrans	Rehabilitate Drainage/HUM-101 Drainage North	2026	No
Caltrans	Fortuna Maintenance Station Crane/Hoist	Not programmed for construction	No
City of Fortuna	Secondary Entry to Old Mill Site	Long-term future	No
City of Fortuna	Expired Approved Subdivision for 39 Homes on 23 acres	Unknown	No
City of Fortuna	Generator Repair Shop in Commercial Zone	TBD, Building Permit Pending	No
City of Fortuna	Brewery Expansion in Commercial Zone	Unknown	No

The impacts associated with the proposed Project analyzed in this IS/MND would not add appreciably to any existing or foreseeable future significant cumulative impact, such as visual quality, cultural resources, biological, traffic impacts, or air quality degradation. Incremental impacts, if any, would be negligible and undetectable. Any applicable cumulative impacts to which this Project would contribute would be mitigated to a less-than-significant level. Incremental impacts, if any, would be very small, and the cumulative impact would be less than significant. Because the proposed Project would not result in significant impacts after mitigation, and because the proposed Project is a road repair rather than a development project that could add to existing and future population growth and development in the area, the proposed Project would not contribute to any significant cumulative impacts which may occur in the area in the future. Therefore, the impact would be less than significant.

c) Does the Project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? (Less Than Significant)

The Project has been planned and designed to avoid significant environmental impacts. As discussed in the analysis throughout Section 3 of this IS/MND, the Project would not have environmental effects that would cause substantial adverse direct or indirect effects on human beings. The impact would be less than significant.

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5. Report Preparers

5.1 City of Fortuna

Merritt Perry, City Manager

Brendan Byrd, Deputy City Engineer

5.2 GHD

Andrea Hilton, Environmental Planner

Misha Schwarz, Senior Scientist

Christian Hernandez, Environmental Scientist

Sam Moose, Environmental Scientist

Kolby Lundgren, Botanist

5.3 Sub-consultants

DZC Archaeology & Cultural Resource Management

Dimitra Zalarvis-Chase, Principal Investigator Historical & Prehistoric Archaeology

Kelly Hollreiser, Archaeologist