Sewer Highway Crossings Retrofit Project

Initial Study/Proposed Mitigated Negative Declaration

McKinleyville CSD

October 20, 2025

→ The Power of Commitment



Initial Study/Proposed Mitigated Negative Declaration

Sewer Highway Crossings Retrofit Project

Prepared for:

McKinleyville CSD
1656 Sutter Road
McKinleyville, CA 95519

Prepared by:

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1. Project Information

Project Title	Sewer Highway Crossings Retrofit Project
Lead Agency Name & Address	McKinleyville Community Services District 1656 Sutter Road McKinleyville, CA 95519
Contact Person, Phone Number, Email	Patrick Kaspari, General Manager, (707) 839-3251, pkaspari@mckinleyvillecsd.com
Project Location	McKinleyville, CA
Project Sponsor's Name & Address	McKinleyville Community Services District 1656 Sutter Road McKinleyville, CA 95519

Project and Assessor Parcel Numbers (APNs)	General Plan[1]	Land Use	Zoning
508-031-001	MCAP	Agricultural Exclusive Prime (AEP)	Agriculture Exclusive 60 Acres (AE-60) / Archaeological Resource (A), Flood Hazard Areas (F), Streams and Riparian Corridor Protection (R)
508-031-004	MCAP	AEP, Natural Resources (NR)	AE-60
508-031-008	MCAP	AEP	AE-60 / A, F, R
508-073-002	MCAP	AEP, NR, Residential / Low Density (RL)	AE-60
508-091-037	MCAP	AEP	AE-60 / A, F, R
510-221-002	MCAP; MCCP	Residential Estates (RE); Public Facility (PF)	Residential Single Family 20,000 sq. ft. (RS-20), Alquist-Priolo Fault Hazard (G); Residential One-Family (R-1), Special Building Site 20,000 sq. ft (B-3), Noise Impact (N), Streamside Management Areas And Wetlands (WR); Public Facility – Urban (PF1) / G
510-271-079	MCAP	RE	PF1/G
510-451-043	MCCP	Residential Low Density 1-7 Dwelling Units Per Acre (RL1-7)	R-1, N
511-011-008	MCAP	Commercial Recreational (CR)	CR / Airport Safety Review (AP), F, R
511-011-024	MCAP	CR	CR / F, R, AP
511-011-025	MCAP	CR	CR / F, R, AP
511-021-060	MCAP, MCCP	CR; Commercial Services (CS), RL1-7,	CR / F; Neighborhood Commercial (C-1), AP, N, WR;

Project and Assessor Parcel Numbers (APNs)	General Plan[1]	Land Use	Zoning
		Airport Safety Review (AP)	R-1, Manufactured Home (T), AP, N, WR; R-1, T, AP
511-031-022	MCAP, MCCP	RL; RL1-7	Residential Single Family 5,000 sq. ft. (RS-5) / AP, N; R-1, T, AP
511-031-060	MCAP	RL; RL1-7	RS-5 / AP, N

[1] MCAP: McKinleyville Area Local Coastal Plan, MCCP: McKinleyville Community Plan

1.1 CEQA Requirements

This Project is subject to the requirements of the California Environmental Quality Act (CEQA). The lead agency is McKinleyville Community Services District (District). 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 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.

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

– A description of the Project including the location of the Project;
– An identification of the environmental setting;
– 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;
– A discussion of the ways to mitigate the significant effects identified, if any;
– An examination of whether the Project would be consistent with existing zoning, plans, and other applicable land use controls; and
– The name of the person or persons who prepared or participated in the Initial Study.

1.2 Project Introduction

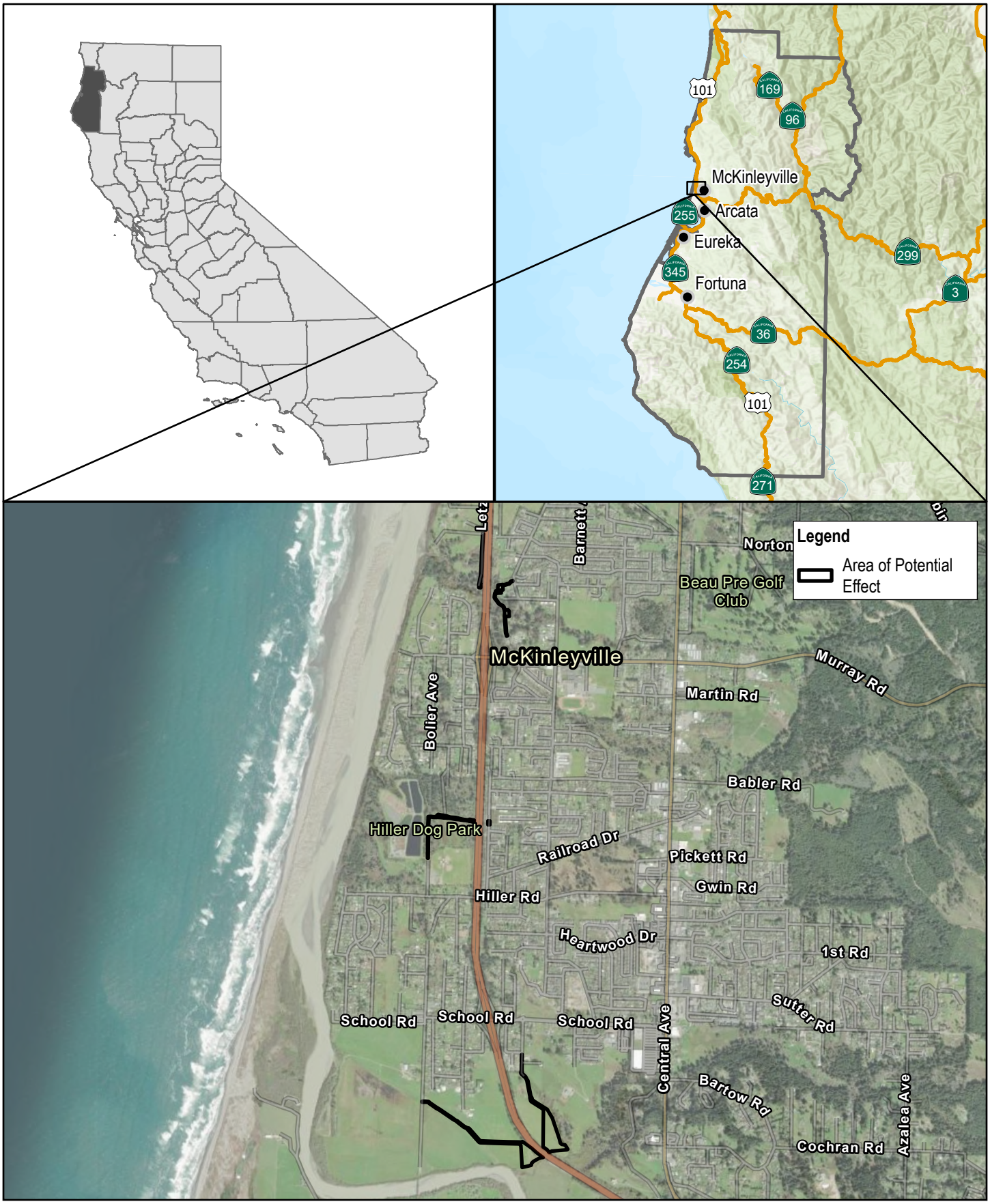
The District received a Hazard Mitigation Grant (HMG) from the Federal Emergency Management Agency (FEMA) to implement the U.S. Highway 101 (U.S. 101) Sewer Crossing Retrofit Project (Project). The grant is administered by the California Governor's Office of Emergency Services (Cal OES). The District currently operates three gravity sewer lines that cross under U.S. 101 in three locations (Northern, Middle, and Southern) throughout McKinleyville (Figure 1 – Vicinity Map). The Project would retrofit the three gravity sewer lines to be more resilient to damage in a major earthquake. Each sewer line would have a slightly larger capacity to handle larger storm event flows than the existing pipes.

1.3 Project Location

The Project is located in McKinleyville, CA, a suburban residential community in Humboldt County, California (Figure 1 – Vicinity Map). McKinleyville is approximately 13 miles north of the City of Eureka and approximately 285 miles north of San Francisco. The three Project sites are at the existing underground sewer highway crossing locations shown in Figure 2.1 through Figure 2.3 (Northern, Middle, and Southern Crossing Site, respectively) and total approximately 15.2 acres (Project Area). Some planned work areas are located within the Caltrans Right of Way (ROW) and would require coordination and encroachment permissions with Caltrans. While most of the Project footprint and construction staging and access would be on District property and along the existing sewer line easements, some sites would also require temporary construction easements from local private owners.

The following 15 APNs would be affected by the Project and are shown in Figure 3:

1. 508-031-08
2. 510-451-43
3. 508-031-04
4. 511-031-60
5. 511-031-22
6. 510-271-79
7. 511-011-19
8. 511-011-08
9. 510-221-02
10. 508-091-37
11. 508-031-01
12. 508-073-02
13. 511-021-60
14. 511-021-63
15. 508-081-33



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McKinleyville Community Services District
Sewer Highway Crossings Retrofit

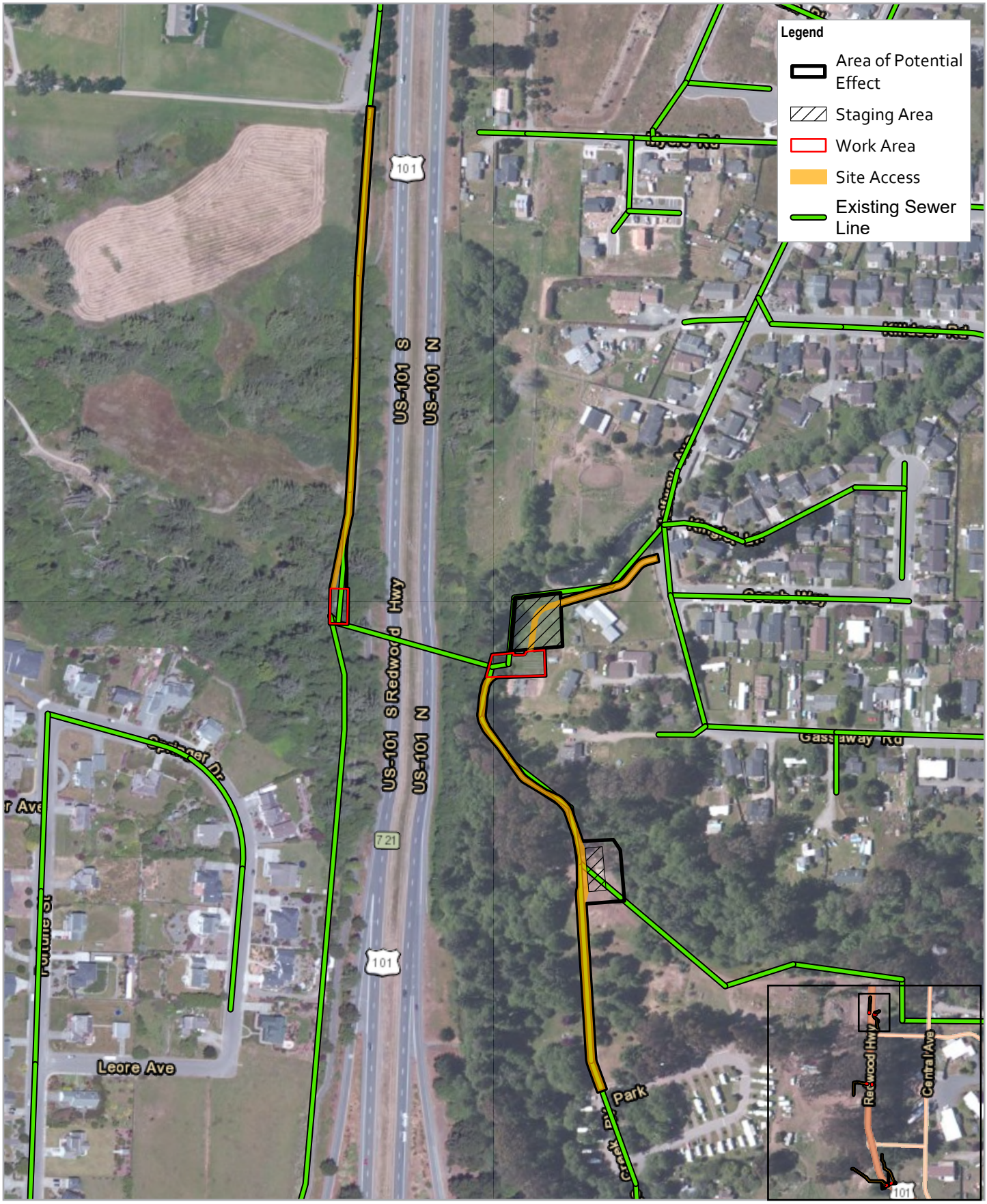
Project No. **12669030**
Revision No. **-**
Date **Sep 2025**

Vicinity Map

FIGURE 1

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Date **Sep 2025**

Project Location
Northern Crossing Site

FIGURE 2.1

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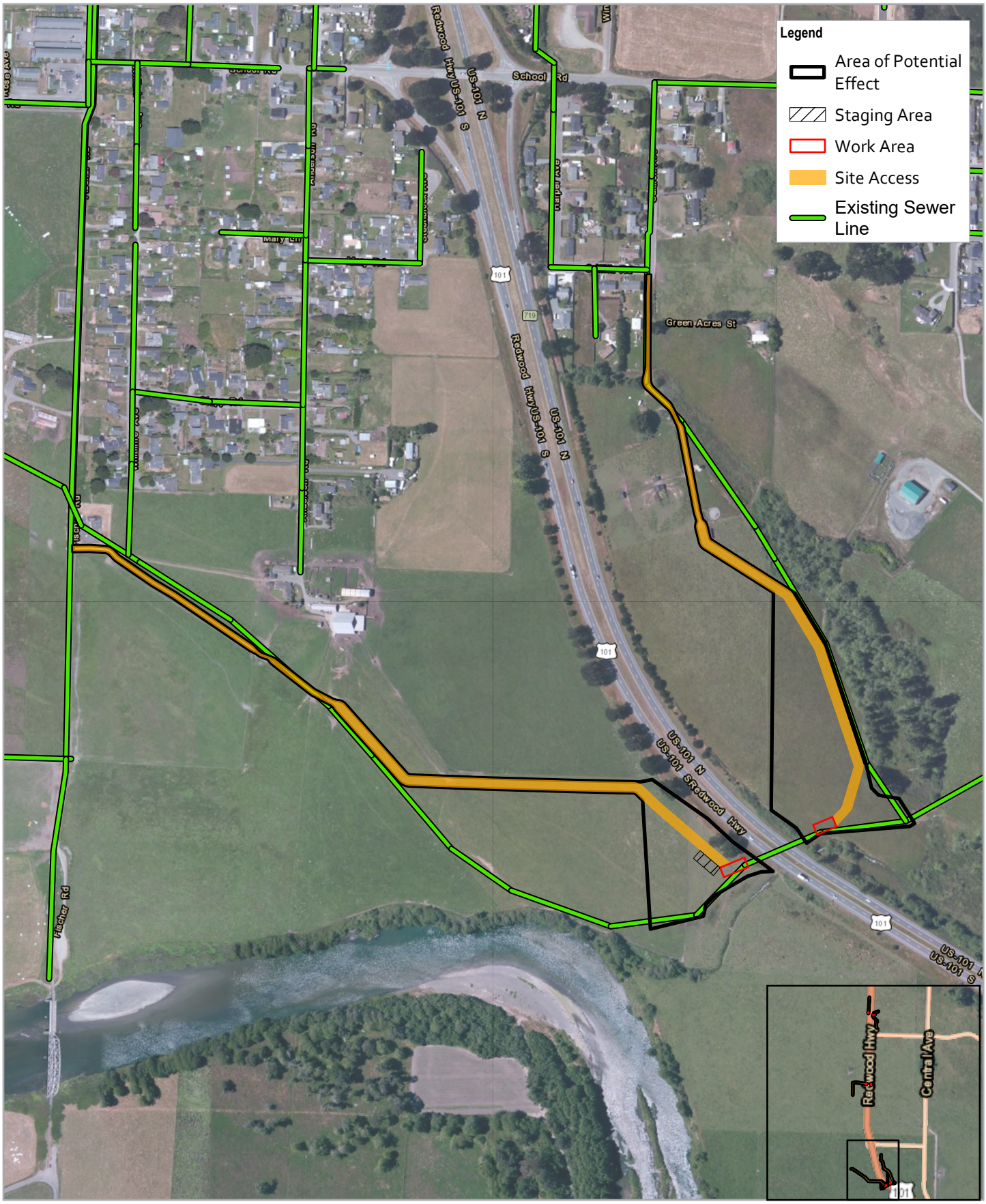
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Revision No. **-**
Date **Sep 2025**

Project Location
Middle Crossing Site

FIGURE 2.2

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Sewer Highway Crossings Retrofit

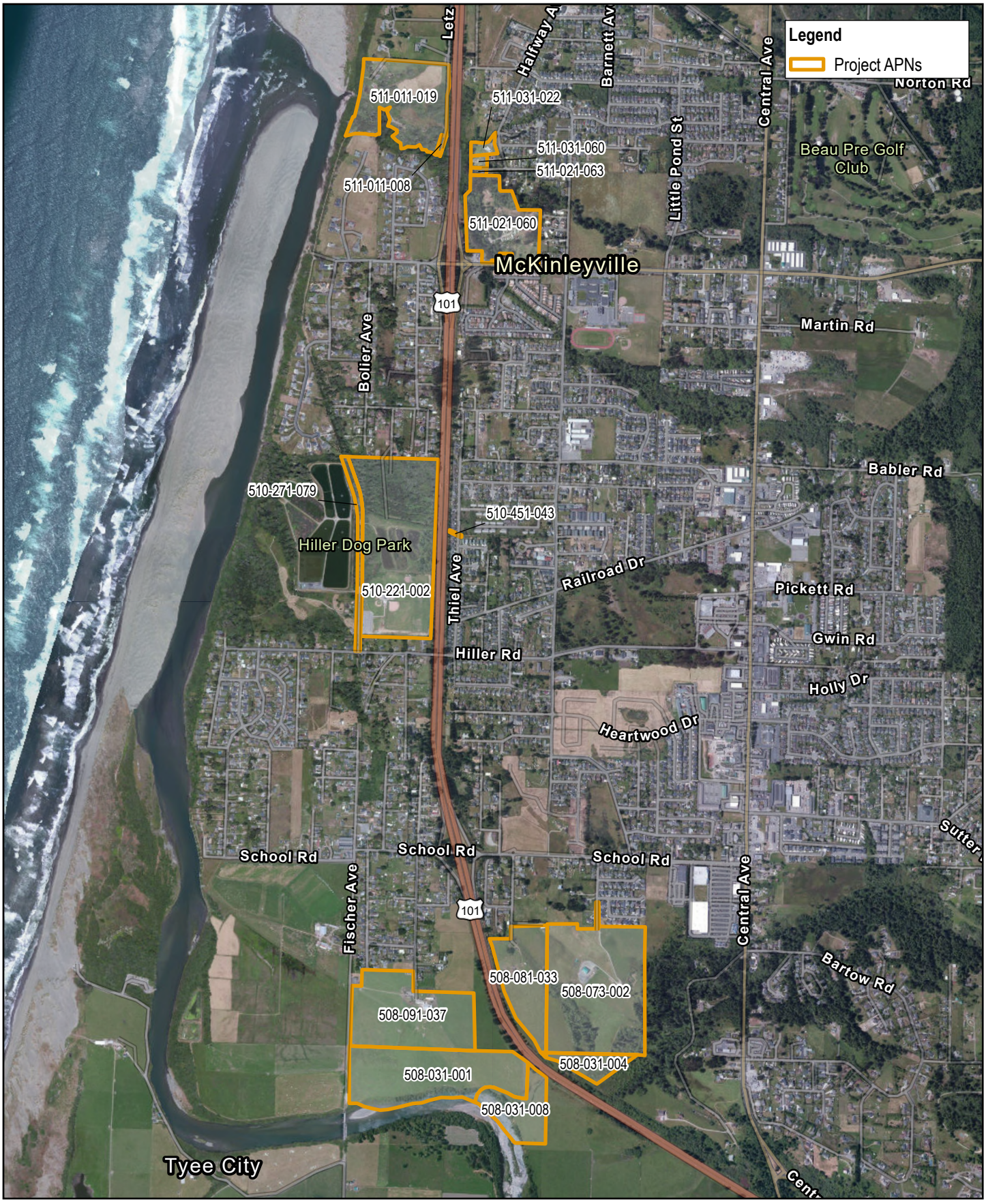
Project Location
Southern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Sep 2025**

FIGURE 2.3

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McKinleyville Community Services District
Sewer Highway Crossings Retrofit

Project No. **12669030**
Revision No. **-**
Date **Oct 2025**

Project APNs

FIGURE 3

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World Imagery: Maxar
Hybrid Reference Layer: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community. Created by: ctuck

1.4 Project Background

The District was established in 1970 and its service area is comprised of approximately 12,140 acres and extends north from the Mad River to Patrick Creek, and east from the Pacific Ocean to the foothills near Fieldbrook. The District is an independent, special district governed by a five member Board of Directors. The District serves a population of approximately 17,000 by providing water, wastewater, parks and recreation, library, streetlights, and open space maintenance services to residents and businesses in the unincorporated area of McKinleyville.

The existing sewers were constructed in 1976, making the gravity sewers approximately 50 years old. The District has been aware of capacity issues with the middle crossing for many years, and replacement of all three crossings are of high priority.

1.5 Project Purpose and Need

The purpose of the Project is to retrofit the three U.S. 101 sewer crossings that drain wastewater from the east side of U.S. 101 to the west side where the District's treatment facility is located. The proposed replacement method for each highway crossing is Horizontal Auger Boring (HAB) with design parameters to be determined after planned geotechnical investigations conducted in October 2025. The retrofitted sewer crossings would increase earthquake resiliency of the utility above current conditions.

2. Project Description

Construction would involve clearing and grubbing of the Project Area, temporary access road improvements, installing new pipelines that are parallel to the existing pipes, Project closure, and revegetation. The new pipeline would be installed using HAB. Project elements necessary for construction are summarized below by Northern, Middle, and Southern Crossing Site. This long-term and independent solution would ensure District can continue providing wastewater services, avoid contamination of local groundwater, streams, and parks with raw wastewater, and protect the integrity of U.S. 101 above the crossings in the event of a major earthquake.

2.1 Project Elements

2.1.1 Install Erosion Control Protection Measures and Exclusion Zones

Prior to ground disturbance, erosion control protection measures would be installed per standard measures. Exclusion zones would also be installed to protect sensitive habitats or species (e.g., wetland protection exclusion zones).

2.1.2 Establish Access and Staging

Prior to construction, access and staging areas would be established as designated in Figure 2.1 through Figure 2.3. Designated access and staging areas would also be used as pipe layout areas. Access and staging areas would utilize existing public roadways, District access roads, and disturbed areas.

2.1.3 Pipeline Installation to Retrofit Three Sewer Crossings

Both the Northern and Southern crossings consist of 15-inch asbestos cement pipe (ACP) within 32-inch steel casings, while the middle crossing is 10-inch ductile iron pipe within a 21-inch steel casing. It is anticipated that all three crossings would be replaced with parallel High Density Polyethylene (HDPE) pipe or Fusible Polyvinyl Chlorine (FPVC) pipe. HDPE pipe would be used where the sewer crosses a known fault, as the durability and flexibility of HDPE makes the material more likely to withstand future earthquakes or fault movement.

Pipeline installation would occur via HAB at the three sewer crossings. HAB is a trenchless construction method in which a pipe is installed along a straight horizontal boring path, beginning and ending at entry and exit pits. The HAB pipe would pass under U.S. 101. Boring equipment would be set up in the entry side pit and bore to the exit point at varying depths according to pipe grade. The Northern Crossing Site has an approximate pit depth of 26 feet on the eastern side of U.S. 101, and 14 feet on the western side. The Middle Crossing Site has an approximate pit depth of 16 feet on the eastern side, and 14 feet on the western side. The Southern Crossing Site has an approximate pit depth of 12 feet on the eastern side and 14 feet on the western side. The auger bore pulls welded steel casing segments with it through to the exit pit hole, passing under U.S. 101 with a maximum depth of approximately 18 feet on the Northern Crossing Site, 36 feet at the Middle Crossing Site, and 18 feet at the Southern Crossing Site. A new sewer carrier pipe is then pulled through the casing and the casing is sealed at each end.

The replacement sewers would require a slight decrease in grade to ensure gravity flow across the slightly longer parallel crossings. The sewers would diverge from the existing alignment, parallel the existing undercrossing of U.S. 101, and then re-converge into the existing sewer. Gravity sewer design requirements may include cleaning velocity, a fill ratio defined as d/D, and slope. Following construction, sewer lines would be tested to ensure they are watertight.

2.1.4 Project Closure and Revegetation

Following construction, the contractor would demobilize and remove equipment, supplies, and construction wastes. The disturbed areas would be restored to pre-construction conditions or stabilized with a combination of grass seed (broadcast or hydroseed), straw mulch, rolled erosion control fabric, and other plantings/revegetation. Revegetation would include replanting and any potential compliance monitoring in support of mitigation required by resource agencies for impacts to sensitive habitats.

2.2 Construction Details

Construction of the Project on the listed APNs would be temporary and would not alter the long-term use of any involved property, pursuant to existing land use designations. Construction involves subsurface work elements only (described below in Section 4 – Environmental Analysis) and would not result in any new substantial above ground infrastructure (e.g., new buildings).

2.2.1 Construction Schedule

Construction is currently scheduled to commence in the summer of 2026, extending through summer 2027. If feasible, vegetation clearing outside of the nesting bird season would occur first, by March 15. Construction would require approximately 12 months.

2.2.2 Construction Activities and Equipment

Construction would primarily include site preparation such as removal of vegetation, followed by excavation, grading, HAB, and hauling. Water from legal sources would be used for dust control and compaction and revegetation.

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

– Clearing and grubbing – To clear access roads and work areas;
– Grading – Throughout Project Area;
– Excavation – To create entrance and exit pits for HAB;
– HAB – To install new sewer crossing under U.S. 101;
– Hauling – Transport of existing road base, pavement, excavation, and other excess materials off-site; transport of imported material to the Project Area (e.g., pipes, manholes, fittings necessary for pipe installation, pipe bedding, structural base, aggregate base for temporary access road improvement, clean fill for final grading, and minor pavement).

Equipment required for construction would include tracked excavators, backhoes, graders, bulldozers, dump trucks, drilling equipment, drill mud recycling equipment, pipe fusing equipment, cranes, water trucks, bobcats, concrete trucks, and pick-up trucks. It is not anticipated that any temporary utility extensions, such as electric power or water, would be required for construction.

2.2.3 Site Access

The Northern Crossing Site would be accessed via Letz Avenue and the District's Letz Pump Station access road on the west side of U.S. 101 and Halfway Avenue on the east side of U.S. 101. The Middle Crossing Site would be accessed via a sewer utility ROW spur from the Hammond Trail west of U.S. 101 and Thiel Avenue on the east of U.S. 101. Temporary access roads would be improved on both the west and east side of U.S. 101 for the Southern Crossing Site. Following construction, these access roads would be restored to pre-construction conditions.

2.2.4 Vegetation Removal

Project work areas are largely unvegetated, and vegetation removal would be limited to minor vegetation removal such as minor mowing, minor trees limbing, and minor brush removal. Tree removal would be unavoidable in some Project work areas. To minimize potential impacts on birds, if feasible, vegetation would be removed prior to March 15 or after August 15 to avoid the nesting bird season.

2.2.5 Stockpiling and Staging

Temporary disturbance for stockpiling and staging would occur within the limits of temporary disturbance at the Project Area. Within the stockpiling and staging area, standard erosion control measures would be utilized to prevent soil, materials, and hazardous materials from impacting the environment.

Excess soils and construction materials would be stored on-site within designated staging areas. Excess materials may be reused on-site for backfill and finished grading. Excess materials may be stockpiled on-site in staging areas once the Project is complete. Excess materials stored over-winter or during wet weather would be pre-emptively treated with erosion control measures. The contractor would haul additional excess materials off-site for beneficial reuse, recycling, or legal disposal.

2.2.6 Import of Fill Material

Fill material would be required for import to the Project Area in order to improve access roads and construct the structural base of design features (e.g., utility access covers).

2.2.7 Traffic and Access Control

The access route to and from the Project Area requires use of local roads. Construction-related traffic would be limited to equipment mobilization to the Project Area and daily personnel travel. Up to 20 daily haul trips are anticipated on a peak day. Up to four work-weeks of peak days may occur, with non-peak days occurring over a twelve-week period per crossing. During construction of the Middle Crossing Site the Hammond Trail, where involved in the Project, would be subject to full closure to through travel. Thiel Avenue would also be subject to controlled one-way traffic during construction of the Middle Crossing Site, with a steel plate available to cover the HAB pit in the event of an emergency and during non-construction hours.

2.2.8 Groundwater Dewatering

Groundwater dewatering is generally not expected to be required. However, if needed, temporary groundwater dewatering would involve pumping water out of a trench or excavation. Groundwater would typically be pumped to a settling pond, Baker tanks (or other similar type of settling tank), or into a dewatering bag. Dewatering water may also

be percolated back into the ground (in uplands) or used for dust control and compaction, revegetation irrigation, or discharged to sanitary sewer.

2.3 Regulatory Permits, CEQA, and NEPA

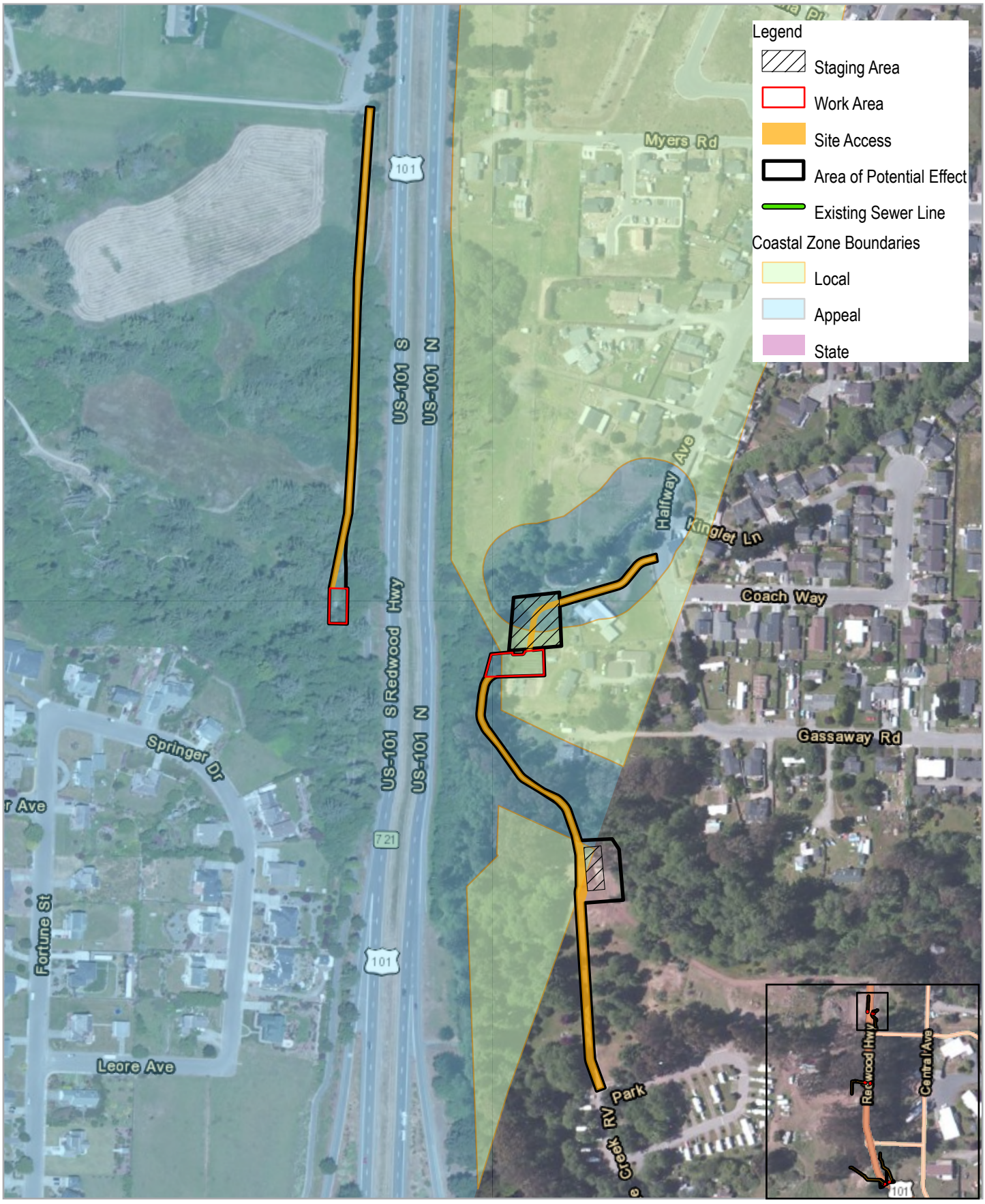
The Project is not anticipated to affect federally listed species; thus, FEMA consultation with the National Marine Fisheries Service or the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act is not anticipated.

Project activities would require coverage under a Coastal Development Permit. The Project is located in the Appeal Zone and Local Zone jurisdiction of the Coastal Zone (Figure 4.1 – Figure 4.3 Coastal Zone); thus, the Coastal Development Permit would be submitted to the Humboldt County Planning Department, but subject to appeal by the state.

Recommended permitting, CEQA, and NEPA pathways are summarized below in Table 2.3-1.

Table 2.3-1 Permitting and CEQA Pathway Summary

Agency	Approval/Permit
CEQA IS/MND	District to be lead agency.
NEPA CE	FEMA to be lead agency.
NHPA Section 106	Complete.
United States Army Corps of Engineers (USACE) Clean Water Act (CWA) 404	Not anticipated; permanent impacts to federally jurisdictional wetlands and waters to be avoided.
Regional Board CWA 401	Required for removal of riparian trees, which are considered a Water of the State.
California Department of Fish and Wildlife (CDFW) 1600	Required for removal of riparian trees.
State Water Resources Control Board (SWRCB)	SWPPP or Water Pollution Control Plan.
Humboldt County	Coastal Development Permit.
Humboldt County Grading Permit	Anticipated to be required.



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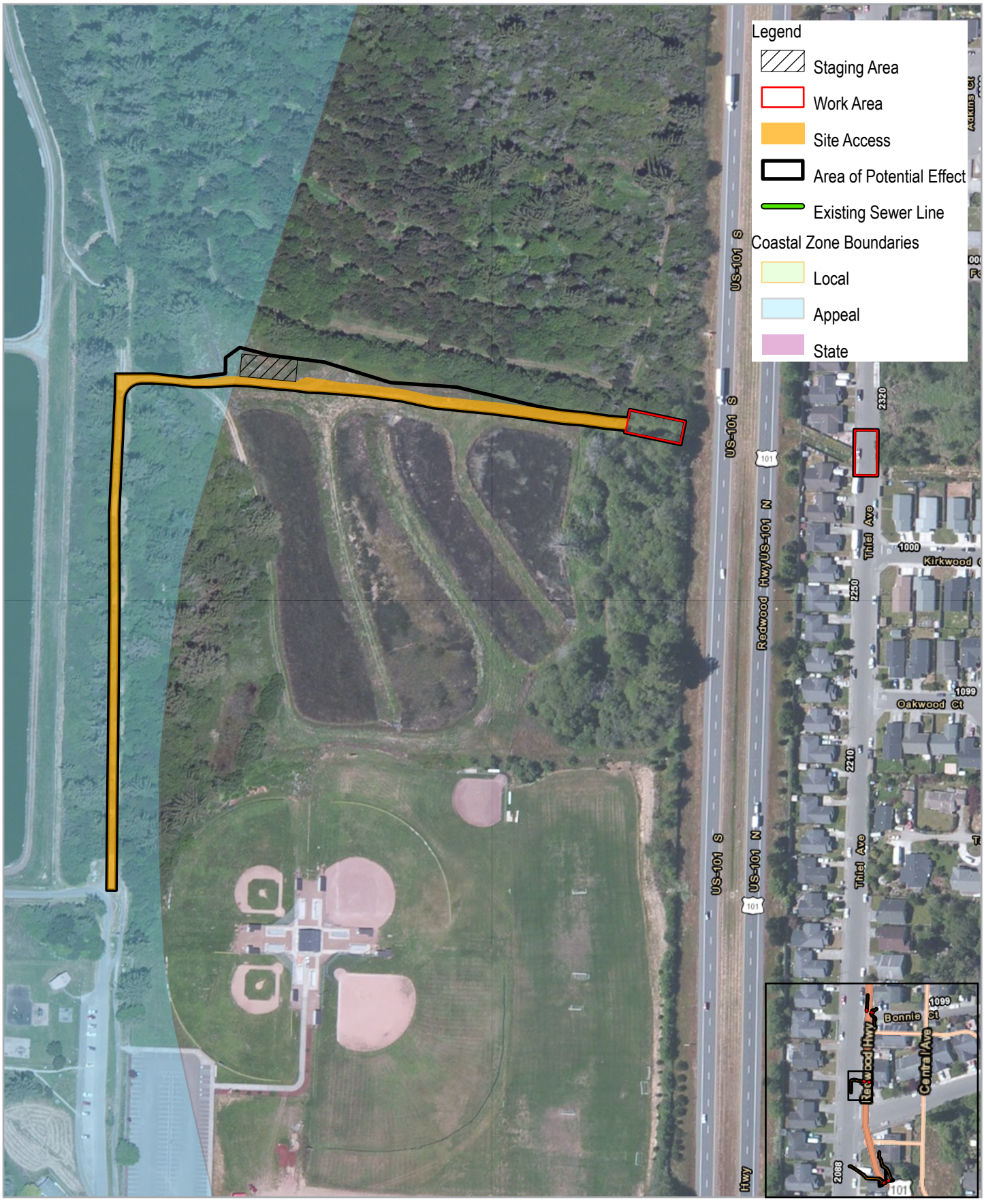
Coastal Zone
Northern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Oct 2025**

FIGURE 4.1

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Sewer Highway Crossings Retrofit

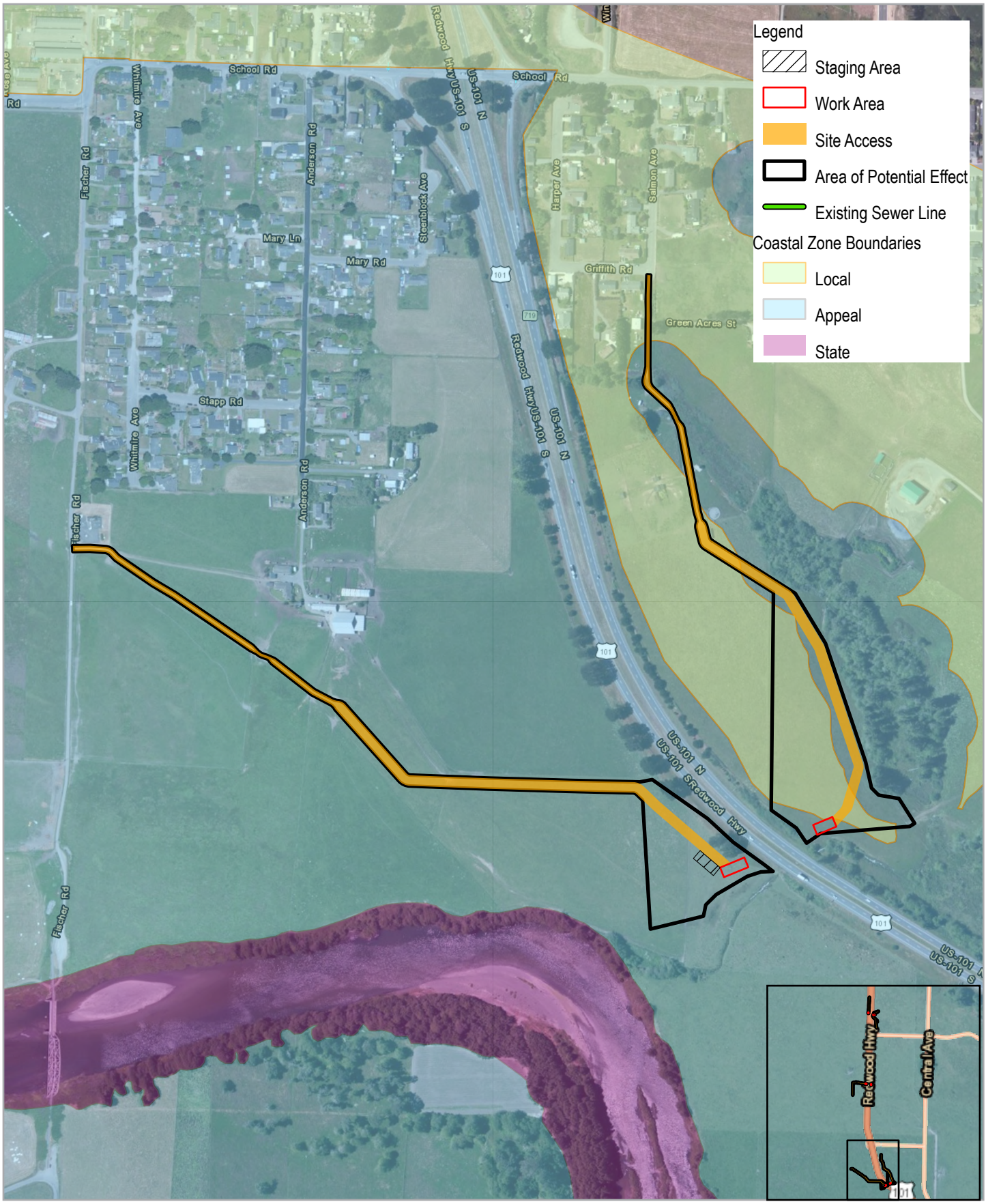
Coastal Zone
Middle Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Oct 2025**

FIGURE 4.2

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Sewer Highway Crossings Retrofit

Coastal Zone
Southern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Oct 2025**

FIGURE 4.3

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Data source: World_Transportation: Esri, HERE, iPC; World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community; World_Transportation: Esri, HERE. Created by: ctuck

2.4 Tribal Consultation Under Assembly Bill 52

The District has sent out requests for consultation for the Project from California Native American tribes pursuant to Public Resources Code Section 21080.3.1. Under Assembly Bill (AB) 52, notification letters were initially sent to the Wiyot Tribe, Bear River Band of the Rohnerville Rancheria, Blue Lake Rancheria, and Cher-ae Heights Indian Community of the Trinidad Rancheria on September 30, 2020; however, a CEQA document was not prepared at that time. Additional letters were sent via email on September 25, 2025, and physically mailed on October 1, 2025, to refresh consultation. Responses received as a result of the 2020 tribal consultation and outreach are discussed in Section 4.18 (Tribal Cultural Resources). Protocols for inadvertent discovery of cultural resources are addressed in Section 4.5 (Cultural Resources).

2.5 Compliance with Existing Regulations and Standard Measures

The Project would abide by applicable regulations and industry-accepted measures to reduce or avoid potential adverse effects that could result from construction or operation of the Project. In addition to these standard measures, mitigation measures are presented in the analysis sections in Chapter 4 to reduce potentially significant environmental impacts to below a level of significance. The Project's Mitigation Monitoring and Reporting Program would include these actions to ensure implementation and is included as Appendix D.

Stormwater Pollution Prevention Plan (SWPPP)

The Project would obtain coverage under the SWRCB, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activities (General Permit). The District would submit permit registration documents (notice of intent, risk assessment, site maps, SWPPP, annual fee, and certifications) to the SWRCB. The SWPPP would address pollutant sources, erosion control measures, and other requirements specified in the Order. The SWPPP would include erosion and sediment control measures, dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. A Qualified SWPPP Practitioner would oversee implementation of the Project SWPPP, including visual inspections, sampling and analysis, and ensuring overall compliance.

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

_____ _____

Pat Kaspari Date

McKinleyville Community Service District General Manager

4. Environmental Analysis

4.1 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?				✓

Visual resources within the Project Area include open viewscapes surrounding agricultural lands near the Mad River at the Southern Crossing Site; the Hammond Trail, forest land, an existing fenced utility sub-station, and residential lands at the Middle Crossing Site; and the riparian area of Norton and Widow White Creek at the Northern Crossing Site, which is visible on the west side of U.S. 101 via the Hammond Trail. The east side of the Northern Crossing Site is not publicly accessible and has limited visibility from off-site locations. Project construction would include retrofitting underground wastewater pipes, which would be installed using HAB under U.S. 101.

a) Have a substantial adverse effect on a scenic vista? (No 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 (OPR 2024). The Project Area does not contain a scenic vista by this definition. The visual setting within which the proposed Project consists of agricultural fields, public trails, and residential homes. Project Areas are adjacent to or visually near U.S. 101. Terrain across the Project Area is generally flat. Vegetation throughout the Project Area generally consists of grasses and other low-habitat value vegetation. Bordering the Project Area are scattered trees as well as the Mad River running directly south of the Southern Crossing Site. Following construction, all Project elements would primarily be located underground and would not be visible, thereby maintaining a consistent visual appearance and minimizing significant alterations to the landscape. No impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)

The Project Area is situated on the east and west side of U.S. 101. The segment of U.S. 101 bordering the Project Area qualifies as a state scenic highway (Caltrans 2025). However, the Project's implementation would not adversely affect the scenic qualities of U.S. 101 because the Project’s underground design ensures that it would not obstruct or impede any existing views along the highway route. By preserving the uninterrupted vistas and natural landscapes visible from the highway, the Project maintains the area's scenic qualities, ensuring that travelers can continue to enjoy the beauty of the surroundings without any negative impact from the Project's construction or operation. No impact would occur.

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? (No Impact)

Proposed actions would not conflict with zoning and other regulations governing scenic quality within Humboldt County. The proposed Project would primarily be located underground and the Project does not include any tall visual elements that would block or screen public views. No impact would result.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (No Impact)

The Project does not include any new sources of light or glare. Construction would not occur at night. No impact would occur.

4.2 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?				✓

There are parcels identified as Agricultural Exclusive Prime (AEP) located within the Southern Crossing Site. Existing agricultural uses include raising hay and other fodder crops. There are no other agricultural or forestry zoning or land uses within the Project Area (Humboldt County 2025a).

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance)? (No Impact)

As of the date of this IS/MND, the Department of Conservation's (DOC's) Farmland Mapping and Monitoring Program (FMMP) has not been completed for Humboldt County. Therefore, lands within the Project Area have not been formally analyzed by the DOC to determine if they meet the criteria for being designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.

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 entirety of the Project Area is Prime Agricultural Soil (Humboldt County 2025a). Additionally, the Project Area meets the definition of Prime Agricultural Land via California Government Code 51201 (c), which is to be utilized in the absence of FMMP mapping (per Public Resources Code 21060.1).

According to Section 51201(c) of the Government Code:

"*Prime Agricultural Land" means any of the following:*

1. *All land that qualifies for rating as class I or class II in the NRCS land use capability classifications.*
2. *Land which qualifies for rating 80 through 100 in the Storie Index Rating.*
3. *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 United States Department of Agriculture.*

4. *Land planted with fruit- or nut-bearing trees, vines, bushes, or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars ($200) per acre.*
5. *Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars ($200) per acre for three of the previous five years.*

No agricultural land uses occur within the North and Middle Crossing Sites. However, the Southern Crossing Site occurs on land that is actively used for agricultural uses. Mapping by the U.S. NRCS indicate six separate soil series within the Project Area (See Section 4.7) (Appendix C). The NRCS soil report shows the primary soil series, 226 – Arcata and Candymountain soils 2 to 9 percent slopes, which covers approximately 82 percent of the Project Area, as well as the HAB installation area in the Southern Crossing Site, as Farmland of Statewide Importance. The Project would retrofit existing pipes and would not result in the conversion of land out of agricultural use or otherwise diminish or change agriculture use. Implementation of the Project would include temporary soil disturbance within the HAB installation areas. However, once the ground is restabilized and revegetated, agricultural use would continue. No impact would occur.

b) Conflict with Agricultural Zoning or Williamson Act Contract? (No Impact)

The AEP land use areas within the Project Area have an agricultural zoning of AE-60. There are no Williamson Agricultural Preserves or Williamson Act Contracts present within the Project Area (Humboldt County 2025a). Wastewater piping align with the compatible uses stated in the Agriculture Exclusive designation. According to Humboldt County code, a principally permitted land use in the AEP zone is “utilities, minor.” Hence, no conflicts with the Agricultural zoning are foreseen, and no impact would result.

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

There are no forest lands, timberland, or lands zoned Timberland Production Zone 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) 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? (No Impact)

As stated, in question a) the Project contains Farmland of Statewide Importance. Farmland of Statewide Importance would not be converted out of agricultural production due to Project implementation. The Project would retrofit existing wastewater lines, does not propose new uses within the area, and would be consistent with existing land management. Soil disturbance during the installation of pipes would occur, but this disturbance would be temporary and the area would be restored to pre-construction conditions, enabling continued agricultural activity along the Southern Crossing Site once stabilization is achieved. There are no other changes in the existing environment caused by the Project that would negatively impact farmland or forest land in or adjacent to the Project Area and, therefore, no impact would result.

4.3 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 Humboldt County portion of 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.

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. Within the Project vicinity, 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 in attainment for all criteria air pollutants except PM_{10}.

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 2024). 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 would 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.

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 Measure AQ-1 is proposed to reduce the potential impact related to PM_{10} fugitive dust by requiring air quality measures.

Mitigation Measure AQ-1: Requirements to Reduce Air Pollution

The contractor shall implement the following air quality protection measures during construction:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, active graded areas, excavations, and unpaved access roads) shall be watered two times per day in areas of active construction to control dust or as necessary.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph, unless the unpaved road surface has been treated for dust suppression with water, rock, wood chip mulch, or other dust prevention measures.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads or similar structures shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. Clear signage shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The NCUAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

With implementation of Mitigation Measure AQ-1, the Project would implement relevant fugitive dust (PM_{10}) 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)

The Project's potential to generate a significant amount of criteria pollutants of concern during Project construction and operation is assessed in this Section. As noted above, Humboldt County is designated non-attainment of the state's PM_{10} standard. The County is designated attainment for all other state and federal standards. Potential impacts of concern would be exceedances of state or federal 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} (Fugitive Dust)

The Project would include vegetation removal, followed by excavation, grading, HAB, and hauling. Generally, the most substantial localized air pollutant emissions would be fugitive dust generated from site clearing and grading. 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 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

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 BACT thresholds for new or modified stationary source projects proposed within the NCUAQMD's jurisdiction. 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. NCUAQMD has indicated that it is appropriate for lead agencies to compare proposed construction emissions that last more than one year to its 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

CalEEMod version 2022.1.1.30 was used to estimate air pollutant emissions from Project construction (Appendix A). Material hauling volumes were estimated based on similar projects. The Project's estimated construction emissions are provided in Tables 4.3-1 and 4.3-2 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 would result in a less than significant impact.

Table 4.3-1 Annual Construction Regional Pollutant Emissions

Parameter	Maximum Annual Emissions (tons/year)			
	ROG	NO_X	CO	PM_{10}
Project Construction (2026)	<0.1	0.3	0.2	<0.1
Project Construction (2027)	<0.1	0.4	0.4	0.1
NCUAQMD Stationary Source Thresholds	40.0	40.0	100.0	15.0
Exceed Threshold?	No	No	No	No

Table 4.3-2 Daily Construction Regional Pollutant Emissions

Parameter	Average Daily Emissions (pounds/day)			
	ROG	NO_X	CO	PM_{10}
Project Construction (2026)	0.1	2	1	0.2
Project Construction (2027)	0.2	2	2	0.3
NCUAQMD Stationary Source Thresholds	50.0	50.0	500.0	80.0
Exceed Threshold?	No	No	No	No

Operation

Following construction, the Project would not include any stationary sources of air emissions. District staff would maintain and operate the Project facilities. The Project would not lead to a need for additional staffing of the District because the Project would retrofit wastewater lines that are already in place. The proposed Project would not increase vehicle traffic on local streets and trails or increase the area's population. Therefore, the Project would not result in an increase in operational emission above existing conditions. No impact would result.

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

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 sensitive receptors for the Northern Crossing Site are residences located within 200 feet located at 3036 and 3030 Halfway Avenue and residents on Seahome Court. The nearest sensitive receptors for the Middle Crossing Site are residences located on Thiel Avenue with the closest being within 100 feet of the HAB installation at 2280 and 2290 Thiel Avenue. The nearest sensitive receptors for the Southern Crossing Site are residences approximately 0.3 miles north of the HAB installation on Salmon Avenue.

The nearest school for the Northern Crossing Site is McKinleyville High approximately 0.5 miles southeast, the nearest school for the Middle Crossing Site is Morris Elementary approximately 0.4 miles northeast, and the nearest school for the Southern Crossing Site is McKinleyville Middle School approximately 1.5 miles northeast.

BAAQMD's Basic Construction Measures included in Mitigation Measure AQ-1 (Requirements to Reduce Air Pollution) minimize idling times for trucks and equipment to five minutes (as required by the California Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, included in Title 13, Section 2485 of California Code of Regulations [CCR]) and ensures construction equipment is maintained in accordance with manufacturer's specifications.

Construction would commence in summer of 2026, extending through summer 2027, approximately 12 months. The Project would not result in prolonged construction equipment use. Construction activity would occur throughout the Project Area footprint and would not occur at any one location for an extended period of time. Due to distance to the

nearest potential receptor, the limited duration and activity for construction, and the implementation of Mitigation Measure AQ-1, which would control fugitive dust, the Project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Therefore, with implementation of Mitigation Measure AQ-1, the construction-related impact would be less than significant with mitigation.

Following construction, the Project would not include any stationary sources of air emissions or new emissions that would result in substantial long-term operational emissions of criteria air pollutants that would substantially affect sensitive receptors. Therefore, Project operation would not expose nearby sensitive receptors to substantial pollutant concentrations.

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 as the Project type is not one of the common types of facilities known to produce odors (i.e., landfill, coffee roaster, 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. The Project emissions or odors caused by construction would not adversely affect a substantial amount of people and construction impact would be less than significant.

Following construction, Project operations would not result in any major sources of odor or emissions because the wastewater lines would be contained underground. Therefore, a less than significant impact would result.

4.4 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 U.S. 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 Biological Resources Report and Wetland Delineation Report were prepared to assess baseline environmental conditions within the Project Area and are included as Appendix B and Appendix C, respectively. Additional memorandums were prepared to document special status plants and sensitive natural communities (SNCs) (GHD 2021a, GHD 2021b). These studies evaluate the potential for any special status plants, wildlife species, or any SNCs or wetlands to occur 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 under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA). Plant species on California Native Plant Society (CNPS) California Rare Plant Ranking (CRPR) Lists 1A, 1B, 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 on April 30, 2021 and July 28, 2021. No special status plants were detected in the Project Area (GHD 2021a).

A database search of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), CNPS Inventory of Rare and Endangered Vascular Plants, and California Natural Diversity Database (CNDDB) search encompassing eight USGS 7.5 Minute Quadrangles (hereafter quads) centered on the Project Area quad (Arcata North) and the surrounding eight quads (Arcata South, Tyee City, Trinidad, Crannell, Panther Creek, Blue Lake, Korbel, and Eureka) was conducted by GHD on September 16, 2020. In addition, citizen science databases such as iNaturalist were reviewed for additional local wildlife information (Appendix B).

Based on database searches, historical records, and an overview of the primary literature, no special status plant species had a high potential of occurring in the Project Area, and three special status plant species had a moderate potential of occurring. The species with a moderate potential of occurring are Howell's montia (*Montia howellii)* with a CRPR of 2B.2, Siskiyou checkerbloom (*Sidalcea malviflora ssp.patula*) with a CRPR of 1B.2, and Coast checkerbloom (*Sidalcea oregana ssp. Eximia*) with a CRPR of 1B.2. Nineteen additional special status plant species were thought to have a low likelihood of occurring within the Project Area (GHD 2021a). Given that required protocol level plant surveys are completed with no detections of sensitive plant species during the initial survey, the impact on special status plants is considered less than significant.

Special Status Wildlife Species

Special status animal species include those listed as threatened, endangered, proposed, or candidate species under the FESA or CESA; designated by CDFW as a Species of Special Concern (SSC) or Fully Protected (FP) species, or have a state rarity ranking of: S1 = critically imperiled, S2 = imperiled, or S3 = vulnerable.

A database search of the USFWS IPaC, National Marine Fisheries Service (NMFS) California West Coast Region Species List Tool, and CNDDB search encompassing eight quads centered on the Project Area quad (Arcata North) and the surrounding eight quads (Arcata South, Tyee City, Trinidad, Crannell, Panther Creek, Blue Lake, Korbel, and Eureka) was conducted by GHD on September 16, 2020. In addition, citizen science databases such as eBird, and iNaturalist were reviewed for additional local wildlife information (Appendix B).

The potential for wildlife species to occur was determined at the level of the BSA. Explanations for determinations are provided in Table 6.3 within Appendix B.

Special Status Bird Species

There are six special status bird species known to be present in the BSA (Appendix B). This includes the CDFW FP White-tailed Kite (*Elanus leucurus*) and American Peregrine Falcon (*Falco peregrinus anatum*), as well as four species that are not known to breed within Humboldt County. There are an additional three special status bird species with a moderate to high potential to occur within the BSA, the SSC Northern Harrier (*Circus hudsonius*), the FP Bald Eagle (*Haliaeetus leucocephalus*), and the S2 ranked Bank Swallow (*Riparia riparia*). No other special status bird species have a moderate to high potential to occur within the Project Area.

In addition, migratory and nesting birds are protected by the Migratory Bird Treaty Act and Fish and Game Code. If state special status and/or native migratory birds are nesting in the Project Area, or up to 300 feet during construction activities (as feasible taking into account private property), these species may be impacted by removal of nesting habitat, elevated levels of noise, and anthropogenic disturbance. This impact is potentially significant.

Mitigation

Mitigation Measure BIO-1 has been incorporated into the Project to reduce the impact to special status and nesting bird species.

Mitigation Measure BIO-1: Avoidance and Minimization Measures to Protect Special Status and Nesting Birds

- Ground disturbance shall be conducted outside of the nesting bird season (which is generally assumed to primarily occur between March 15 – August 15). If ground disturbance or vegetation clearing cannot be confined to outside of the nesting bird season, a qualified biologist shall conduct a pre-construction survey in suitable habitat. This survey shall include a full area search for nesting activity within the Project Area and a buffered distance of 50 feet from the Project Area. In addition, this should include frequent visual raptor scans with binoculars within 300 feet of the Project Area.
- If ground disturbance and vegetation removal work lapses for seven days or longer during the nesting season in the direct vicinity of the area surveyed, the qualified biologist shall conduct a supplemental nesting bird pre-construction survey before Project work is reinitiated.
- If active nests are detected within the Project Area and 50-foot buffer or within the 300-foot area (for raptors), 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 Project Area, but up to 300 feet of the Project Area, buffers would be implemented as needed. In general, the buffer size for common species would be determined on a case-by-case basis in consultation with CDFW (as needed) and, if applicable, with USFWS. Buffer sizes would take into account factors such as (1) noise and human disturbance levels at the construction site; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species.
- The qualified biologist shall monitor all nests at least once per week to determine whether birds are being disturbed. 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, and/or halting disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased.

Implementation of Mitigation Measure BIO-1 would reduce potential impacts to special status and nesting bird species to a less than significant level.

Special status Mammal Species

There are three special status mammal species with a moderate potential to occur within the BSA (Appendix B). This includes the SSC and S2 ranked Townsend's Big-eared Bat (*Corynorhinus townsendii*), the S3 ranked North American Porcupine (*Erethizon dorsatum*), and the S3 ranked Long-eared Myotis (*Myotis evotis*). Trees within the Project Area, and potentially buildings within the BSA, may provide roosting habitat for Townsend's Big-eared Bat and Long-eared Myotis. Vegetation removal and disturbance has the potential to impact mammals, if present.

Mitigation

The Townsend's Big-eared and Long-eared Myotis bats have a moderate potential to occur based on the presence of suitable habitat nearby of the Project vicinity. Mitigation Measure BIO-2 would be incorporated into the Project to reduce the impact on special status bats.

Mitigation Measure BIO-2: Avoidance and Minimization Measures to Protect Special Status Bats

If trees are to be removed during any season, a phased removal of trees shall be conducted where selected limbs and branches not containing cavities or peeled bark are removed on the first day, with the remainder of the tree removed on the second day. If construction occurs during the bat maternity season (generally May 1 through August 30), a qualified bat biologist shall conduct surveys within suitable habitat for special status bats. Survey methodology shall include visual examination with binoculars and may optionally utilize ultrasonic detectors to determine if special status bat species utilize the vicinity. Surveys shall be conducted by a

qualified biologist within seven days prior to construction in any areas where potential maternity roosts may be disturbed/removed.

The North American Porcupine has a moderate potential to occur based on the presence of suitable habitat nearby of the Project vicinity. Mitigation Measure BIO-3 would be incorporated into the Project to reduce the impact on the special status porcupine.

Mitigation Measure BIO-3: Avoidance and Minimization Measures to Protect North American Porcupine

Steep-sided excavations capable of trapping mammals shall be ramped or covered if left overnight. Project personnel are not permitted to have pets (i.e., dogs) in the Project Area during construction. No hazardous materials (including anticoagulant rodenticides) or other potentially injurious materials attractive to mammals shall be utilized or left unattended during construction or operation activities. Trash shall be placed in receptacles and removed from the Project Area daily at the end of the work shift to avoid being left on-site overnight.

Implementation of Mitigation Measures BIO-2 and BIO-3 would reduce potential impacts to special status mammal species to a less than significant level.

Special Status Invertebrate Species

No special status invertebrate species have a moderate or high potential to occur within the Project Area due to a lack of suitable habitat available (Appendix B).

Special Status Fish Species

The BSA encompasses Norton Creek. There are seven special status fish species that have a moderate to high potential of occurring in Norton Creek, including:

High Potential of Occurring Within BSA

– Coastal Cutthroat Trout (*Oncorhynchus clarkii clarkii*), S3, SSC
– Coho Salmon – southern Oregon / northern California Evolutionarily Significant Unit (ESU) (*Oncorhynchus kisutch pop. 2*), FT, ST, S2
– Steelhead – northern California Distinctive Population Segment (DPS) (*Oncorhynchus mykiss irideus pop. 16*) FT

Moderate Potential of Occurring Within BSA

– Pacific Lamprey (*Entosphenus tridentatus*), SSC
– Western Brook Lamprey (*Lampetra richardsoni*), SSC
– Summer-run Steelhead Trout (*Oncorhynchus mykiss irideus pop. 36*) State Candidate Endangered, S2, SSC
– Chinook Salmon – California coastal ESU (*Oncorhynchus tshawytscha pop. 17*) FT, S1

Though the BSA encompasses Norton Creek, no in-water work would occur and the channel or banks of Norton Creek and any unnamed tributaries would be avoided. Construction within 100 feet of the water body would occur during the dry season (June 15 and October 15). Prior to construction, erosion control would be installed and maintained throughout the Project (Section 2.1.1 – Install Erosion Control Protection Measures and Exclusion Zones). Compliance with existing regulations requires development and implementation of a SWPPP in accordance with the State General Construction Permit, a Lake and Streambed Alteration Agreement from CDFW, and a Water Quality Certification from the North Coast Regional Water Quality Control Board (NCRWQCB) (See Section 2.5 – Compliance with Existing Regulations and Standard Measures). 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, with incorporation of erosion control standards, the SWPPP and other required permits, the potential impact on special status fish would be less than significant.

Special Status Amphibian and Reptiles Species

There are two special status amphibian and reptile species that have a moderate potential to occur within the BSA. This includes the S3 ranked and SSC Northern Red-legged Frogs (*Rana aurora*) and the proposed federally threatened and SSC Northwestern Pond Turtle (*Actinemys marmorata*). No other special status amphibian or reptile species have a moderate to high potential of occurring within the BSA (Appendix B).

The Northwestern Pond Turtle occurs in both permanent and intermittent waters, including marshes, streams, rivers, ponds, and lakes. The U.S. Fish and Wildlife Service is not currently conferencing on the Northwestern Pond Turtle under Section 7 of the Endangered Species Act. Northern Red-legged Frogs are generally found near permanent water, but can be found far from water, in damp woods and meadows, during the non-breeding season. Potential habitat exists within and adjacent to Norton Creek. Impacts to these species could potentially occur to adults out of water during and after the breeding season due to crushing or burying from vehicle use and excavation/earth moving. These impacts could be potentially significant.

Mitigation

The Northern Red-legged Frog and Northwestern Pond Turtle have a moderate potential to occur based on the presence of suitable habitat near the Project vicinity. Mitigation Measure BIO-4 would be incorporated into the Project to reduce the impact on special status amphibians and reptiles.

Mitigation Measure BIO-4: Avoidance and Minimization Measures to Protect Special Status Amphibian and Reptiles

No more than 48 hours prior to commencement of ground disturbance within 50 feet of suitable reptile and/or amphibian habitat (e.g., Norton Creek riparian corridor, other riparian areas, damp meadows), a qualified biologist shall perform a pre-construction survey for Northwestern Pond Turtles and Northern Red-legged Frogs and shall relocate any individuals or egg masses that occur within the work-impact zone to nearby suitable habitat. In the event that a Northwestern Pond Turtle or Northern Red-legged Frog is observed in an active construction zone, the contractor shall halt construction activities in the immediate area where observed and the turtle or frog shall be moved to a safe location in similar habitat outside of the construction zone.

Implementation of Mitigation Measure BIO-4 would reduce potential impacts to special status amphibian and reptile species to a less than significant level.

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 U.S. Fish and Wildlife Service? (Less than significant with Mitigation)

Protocol level vegetation assessments and mapping of SNCs and Environmentally Sensitive Habitat Areas (ESHAs) occurred on October 14, 2020. There were two vegetation association mapped within the Project Area that qualified as a SNC, as well as one potential ESHA (Figure 5.1 through Figure 5.3, Appendix B, Table 4.4-1). Sitka Spruce Alliance, a SNC with a state rank of S1.1, was observed on the western side of both the Northern and Middle Crossing Site. Coastal Willow Alliance, a SNC with a state rank of S3, was observed on the western side of the Middle Crossing Site. Red Alder Alliance, with a state rank of S4, occurs both in riparian areas and other portions of the Project Area near the Northern and Middle Crossing Sites.

Table 4.4-1 SNC and Potential ESHAs Within Project Area

Alliance Name	State Rank	Area (ft^2)	Temporary / Permanent Impact
Red Alder Alliance Potential ESHA	S4	29,002	Temporary
Sitka Spruce Alliance SNC	S1.1	14,863	None
Coastal Willow Alliance SNC	S3	182	None

No Project elements are planned near the mapped SNCs, which would be completely avoided during construction. The Project would remove several mature trees within the mapped Red Alder Alliance, including several hazard trees that are severely leaning located within the Northern Crossing Site (Image 1 and 2). Additional trees within mapped Red Alder Alliance would be removed on the western portion of the Middle Crossing Site to accommodate the HAB pit (Image 3). This impact would be potentially significant.



Image 1 ***Two Red Alders to be Removed at the Western Side of the Northern Crossing Site***



Image 2 *Leaning Red Alders to be Removed at the Eastern Side of the Northern Crossing Site*



Image 3 *Red Alders to be Removed at the Western Side of the Middle Crossing Site*

Mitigation

Individual trees within the Red Alder Alliance would be removed during Project construction where unavoidable. Mitigation Measure BIO-5 would be incorporated into the Project to reduce the impact on SNCs.

Mitigation Measure BIO-5: Avoidance and Minimization Measures to Protect Environmentally Sensitive Habitat Areas and Sensitive Natural Communities

Construction within vegetation communities shall be avoided to the greatest extent practicable. If impacts are unavoidable and individual trees must be limbed or removed, mitigation of individual native trees over six inch DBH shall occur at a minimum ratio of 1:1. On-site locations for mitigation shall be prioritized. If suitable locations for on-site mitigation are not feasible, off-site mitigation shall occur within the McKinleyville Community Forest, with an emphasis on siting in riparian corridors. Following construction, the disturbed understory shall be restored with appropriate native cover via seeding or container planting.

Implementation of Mitigation Measure BIO-5 would reduce potential impacts to SNCs 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)

A wetland delineation was completed on October 14, 2020, 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 (Appendix C). In addition, the Project is within the California Coastal Zone and the McKinleyville Area Local Coastal Plan.

The wetland delineation identified three, three-parameter wetlands that total 1,157.3 ft^2 and may be indirectly hydrologically connected to the Widow White Creek/Norton Creek riparian area (Figure 6, Appendix C, Table 4.4-2).

Table 4.4-2 Wetlands within the Project Area

Wetland Name	Central lat/long	Wetland Size (ft^2)	Jurisdiction
Wetland 1	(40.959984, -124.115396)	1,016.3	Regional Board
Wetland 2	(40.959600, -124.115039)	72.7	Regional Board
Wetland 3	(40.960500, -124.116562)	68.3	Regional Board
Total Three-Parameter Wetland in Project Area		**1,157.3**	

Under the Coastal Act, as well as the McKinleyville Area Local Coastal Plan, wetland areas shall be defined to satisfy at least one of the following three criteria: (1) the presence of at least periodic predominance of hydrophytic vegetation; (2) predominately hydric soils; and (3) periodic inundation for seven consecutive days.

Two upland sampling points were also described within areas of planned disturbance to confirm and document the absence of any wetland indicators in these areas. The upland points did not meet the hydrophytic vegetation parameter, as the vegetation plots did not pass the prevalence index test and the dominance test. The soils did not meet the hydric soils parameter and were therefore not a wetland. The upland points also did not have any primary or secondary indicators of wetland hydrology to meet the hydrology parameter. Therefore, the upland plots did not meet any parameters to be considered a wetland.

Based on the current design, the Project would require small-scale temporary impacts to wetlands due to construction equipment access routes, as well as temporary construction impacts from grading and HAB installation. Permanent impacts of the wetlands are not anticipated but also may occur as Project design progresses. Impacts to wetland resources would have a potentially significant impact.

Mitigation

Impacts to wetlands are temporary but may become permanent. Mitigation Measure BIO-6 would be implemented to reduce the impact on wetlands.

Mitigation Measure BIO-6: Avoidance and Protection of Wetlands

The Project shall implement the following avoidance and protection measures for juxtaposed Coastal Act wetlands, Waters of the United States, and Waters of the State :

- The Project shall attempt to avoid or minimize impacts to wetlands/waters to the greatest extent feasible in the final design plans.
- Juxtaposed wetlands (not proposed for disturbance) shall be clearly identified in the construction documents and reviewed by the District prior to issuing for bid to ensure they are clearly marked as equipment exclusion zones during construction.
- Suitable perimeter control measures, 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 measures shall be installed prior to any clearing or grading activities.
- Wetlands temporarily disturbed during Project construction shall be restored to pre-Project topography and seeded with a California native grass seed mix or planting suitable native riparian species.
- If a permanent wetland impact cannot be avoided, then the Project shall compensate for impacts to identified wetlands through creation of wetlands at a ratio acceptable to jurisdictional agencies. A Mitigation and Monitoring Plan shall be prepared in coordination with jurisdictional agencies. The Mitigation and Monitoring Plan shall identify the location(s), size, and type of mitigatory wetlands. The Mitigation and Monitoring Plan shall also identify acceptable plant pallets and requirements to align with groundwater connectivity, a site protection instrument, numeric success criteria, monitoring methods, and reporting requirements/schedules. Compensation for wetlands shall occur so there is no net loss of wetland habitat at ratios to be determined in consultation with jurisdictional agencies.

Mitigation Measure BIO-6 requires clear identification and avoidance of wetlands outside of the construction footprint and requires restoration of temporarily impacted wetlands within the construction footprint to pre-Project conditions including seeding with California native grass seed. Mitigation Measure BIO-6 also requires compensatory mitigation in the event of permanent wetland impacts. With implementation of Mitigation Measure BIO-6, a less than significant impact would occur to wetlands.

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. The Project does not include new fencing, roadways, or other obstacles to terrestrial wildlife migration. The pipelines would be located beneath Norton Creek parallel to existing piping. Thus, no impact would occur.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (No Impact)

McKinleyville Area Local Coastal Plan

The Resource Protection Policies and Standards Section 3.40 and 3.41 of the McKinleyville Coastal Area Plan (Humboldt County 2014) summarizes policies germane to the protection of biological resources. No conflicts with policies or ordinances protecting biological resources have been identified. Therefore, no impact would occur.

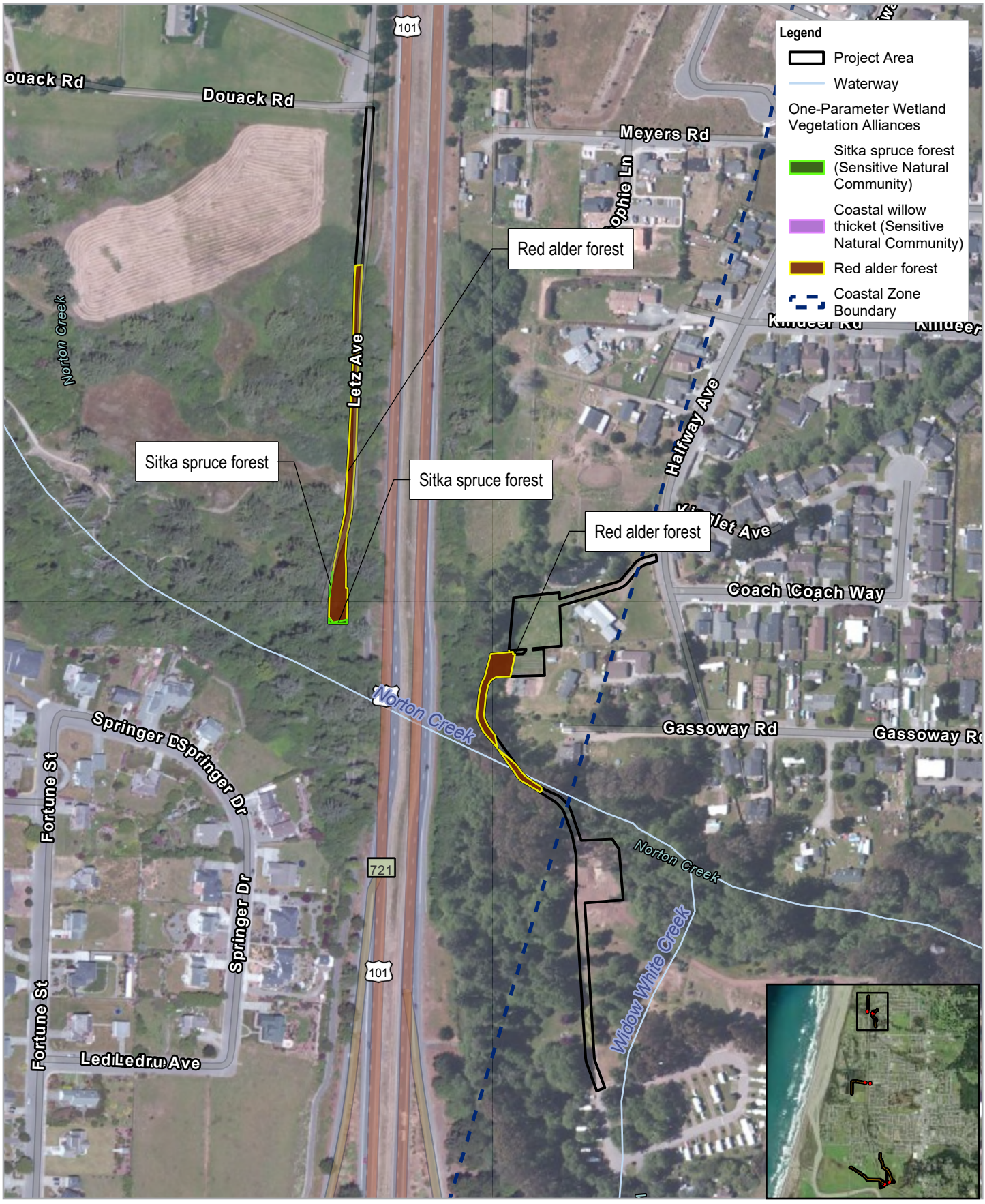
McKinleyville Community Plan

Section 3400 of the McKinleyville Community Plan include policies related to sensitive and critical habitats (Humboldt County 2018). Policy 3422 establishes Streamside Management Areas (SMAs) as 100 feet measured horizontally

from the edge of top of bank or edge of riparian dripline, whichever is greater. Development within a Streamside Management Area requires a use permit from Humboldt County, which the Project would obtain. Policy 3422 also requires replanting of disturbed areas with riparian vegetation if natural regeneration does not occur within two years of the completion of the development project. The Project would utilize HAB installation, using the least environmentally damaging alternative, and impacted areas would be restored to pre-Project conditions (See BIO-6). The Project would also replant and stabilize disturbed areas. No conflicts with policies or ordinances protecting biological resources have been identified. Therefore, no impact would occur.

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.



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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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GHD

McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

SNCs and Potential ESHAs
Northern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 5.1

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Map Projection: Lambert Conformal Conic
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McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

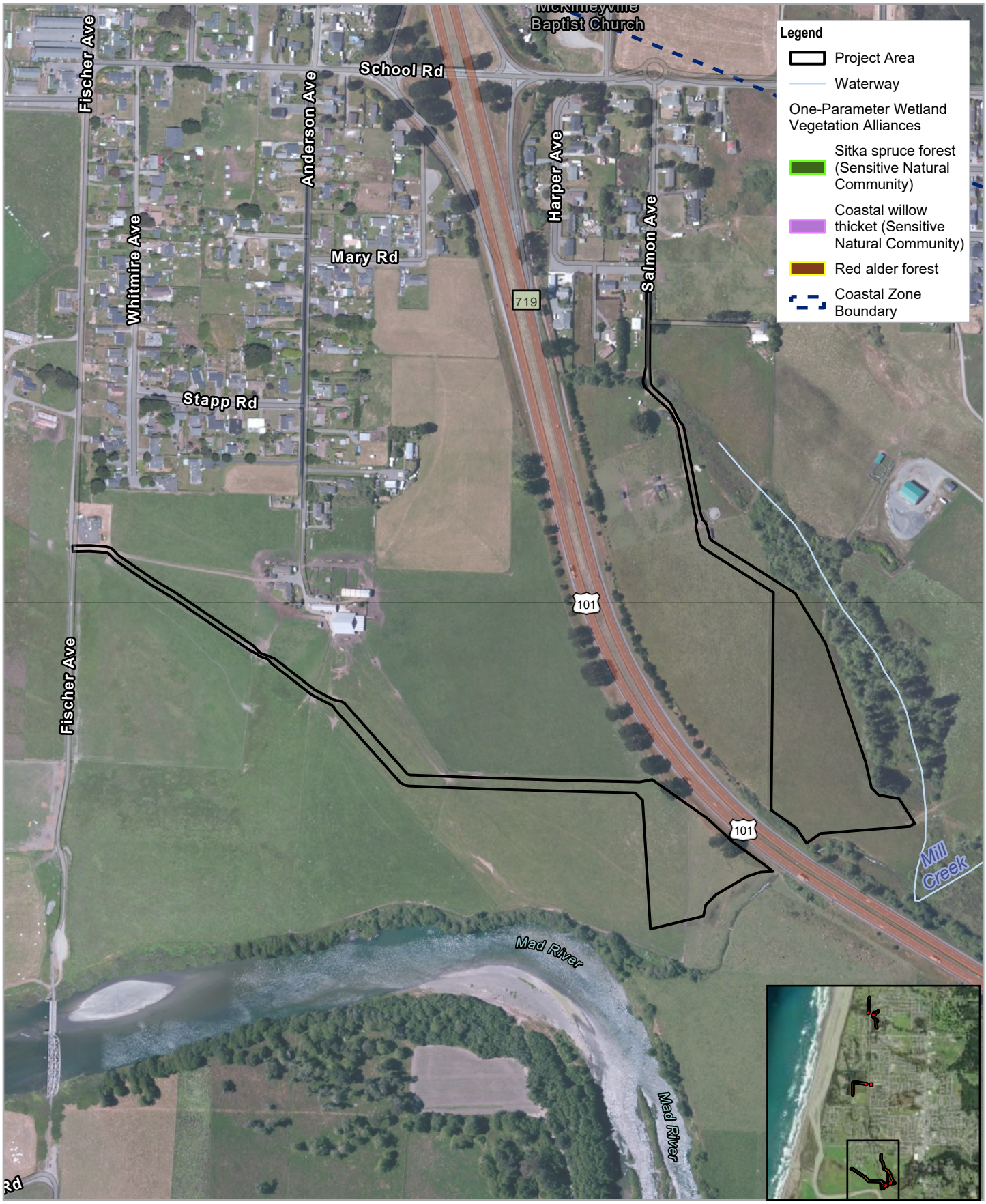
SNCs and Potential ESHAs
Middle Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 5.2

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Map Projection: Lambert Conformal Conic
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McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

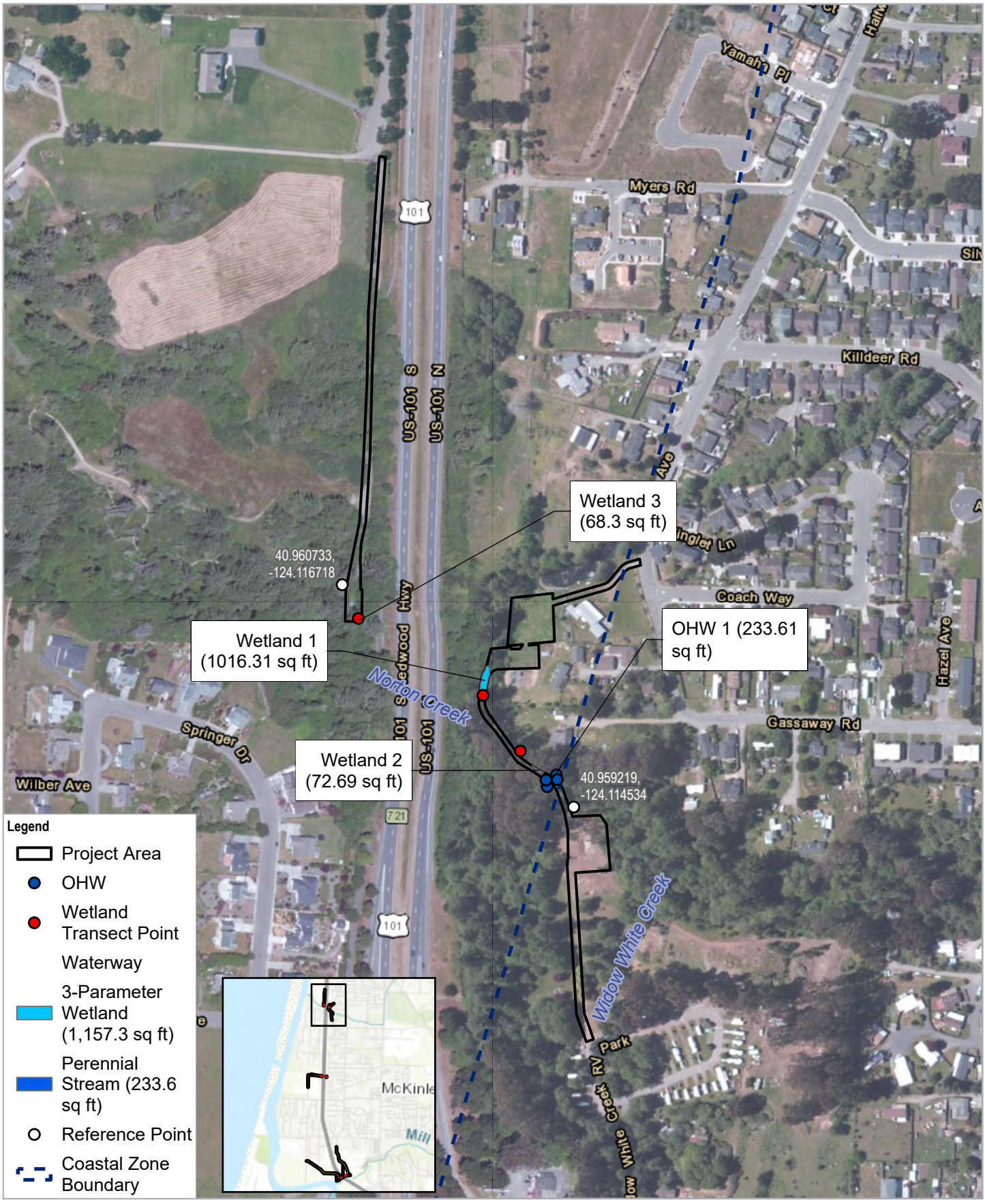
SNCs and Potential ESHAs
Southern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 5.3

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Data source: World Imagery: Earthstar Geographics; World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS; World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community; World_Transportation: Esri, HERE; Hybrid Reference Layer: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community. Created by: ctuck



Paper Size ANSI A (1" = 333 ft)

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

Wetlands
Northern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 6.1

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Paper Size ANSI A (1" = 250 ft)

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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GHD

McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

Wetlands
Middle Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 6.2

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Paper Size ANSI A (1" = 500 ft)

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Feet

Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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GHD

McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

Wetlands
Southern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 6.3

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4.5 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) which is equivalent to the Project Area and area of ground disturbance (Figure 2.1 through Figure 2.3). A Phase 1 Cultural Resource Inventory (CRI) was prepared by DZC Archaeology and Cultural Resource Consulting, which assessed the potential for surficial and/or buried archaeological and historical resources in the proposed APE 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 APE.

There are two previously recorded resource within the APE at the Southern Crossing Site and four resources within a quarter mile (DZC and CRC 2021). An Extended Phase 1 Investigation (XPI) that focused on the Southern Crossing Site was prepared by Pacific Legacy which utilized shovel test units throughout known and potential areas of cultural sensitivity within the APE (Pacific Legacy 2023). 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)

There are not built historic resources in the APE that would be modified or otherwise impacted by the Project (DZC and CRC 2021). Subsurface historic resources are discussed in Section 4.5 (b) below. There would be no impact to built historic resources.

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

The CRI indicated a moderate to high potential for buried archaeological historic resources and a high to very high potential for historical resources to be found at the surface within the APE. However, the CRI did not identify known historical resources within the APE, and no historical resources were encountered during the field surveys (DZC and CRC 2021). The XPI investigation identified several areas throughout the Southern Crossing Site APE with historical scatter identified to a depth of 60 cm below surface (cmbs) (Pacific Legacy 2023). These scattered resources are ineligible for listing as a historic resource due to significant modifications, advanced stages of disrepair, and lack of historic significance. Based on the findings of the CRI and XPI, there are no archaeological historic resources within the Project Area. Thus, no impact would result to subsurface historic resources.

The CRI indicated a moderate to high potential for buried prehistoric resources and a high to very high potential for prehistoric resources to be found at the surface within the APE at the Southern Crossing specifically. During the CRI field surveys on October 13, 2020 and December 1, 2020, DZC Archaeology and Cultural Resource Consulting identified two previously recorded sites located within the Southern Crossing Site APE. Additionally, the survey identified one new resource at the Southern Crossing that was recorded.

Native American tribes and the NAHC were contacted to discuss the proposed Project through the CRI process. Consultation between DZC, the Blue Lake Rancheria, the Wiyot Tribe, and the Bear River Band of the Rohnerville Rancheria Tribal Historic Preservation Officers (THPOs) occurred (DZC and CRC 2021, Pacific Legacy 2023). All three THPOs responded with interest and concern regarding the archaeological sensitivity of the area surrounding the Mad River estuary. THPO of The Bear River Band of the Rohnerville Rancheria, THPO of the Blue Lake Rancheria, and Chairperson of the Wiyot Tribe of Loleta requested the creation of the XPI within the Southern Crossing Site, as well as the presence of a Cultural Resource Monitor during the excavation phase of the Project within the Southern Crossing Site. The CRI includes recommended mitigation measures to limit significant impacts to the archaeological resources, which were recommended and agreed upon as well and are implemented below as Mitigation Measures CR-1 through CR-4.

Pacific Legacy expanded on the CRI by implementing the XPI within the Southern Crossing Site between June 14 and June 22, 2023, and further delineated the boundaries of the three identified resources. The XPI stated that the likelihood of buried archaeological deposits being located below the maximum trench excavation depth of 60 cmbs is low (Pacific Legacy 2023). The wastewater line for the Southern Crossing Site would be installed at a depth between 12 to 18 feet below the surface and would not impact the identified resources. However, the pits required for HAB installation would potentially impact these cultural resources. Additionally, due to the cultural sensitivity of the vicinity, it is possible that archaeological resources may be inadvertently discovered during ground disturbance, which could result in a potentially significant impact.

Mitigation

To adhere with the CRI recommended measures to reduce potential impacts to archaeological resources, Mitigation Measures CR-1 through CR-4 would be implemented.

Mitigation Measure CR-1: Tribal Cultural Monitoring and Monitoring Plan

A Monitoring Plan shall be drafted in consultation with the Blue Lake Rancheria, Wiyot Tribe, and Bear River Band of Rohnerville Rancheria. The Monitoring Plan shall include the following:

- Specifics of post-implementation recording requirements;
- How discoveries will be addressed;
- How collections will be curated or reburied; and
- Information to consult with the Native American Heritage Commission to determine the most likely descendant for the site may also be appropriate and will assist the consultation process should human remains be inadvertently discovered.

All ground disturbing work within the Southern Crossing Site shall be monitored by a Tribal Cultural Monitor who will ensure the proper treatment of inadvertently discovered resources in accordance with the Monitoring Plan.

Mitigation Measure CR-2: Avoidance and Minimization for Exclusion Fencing

Protective fencing shall be placed along each side of the access road entering and exiting the Southern Crossing Site to both define the access route and prevent incursion into the archaeological resources. The protective fencing shall extend five meters beyond the entrance and exit of the site boundary, shall be installed prior to commencement of Project activities, and remain in place for the duration of all Project activities.

Mitigation Measure CR-3: Avoidance and Minimization for Vehicle Access

In the event of wetted conditions of the access road for the western portion of the Southern Crossing Sites, tracked vehicles shall be prohibited until conditions have dried.

Mitigation Measure CR-4: Inadvertent Discovery of Archaeological Material

A pre-construction meeting shall be held with field contractors, where the protocols for inadvertent discovery (described below) shall be communicated. 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 20 meters (66 feet) of the discovery, per the requirements of CEQA (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 Measures CR-1 through CR-4 would reduce the potential impacts to a less than significant level during construction because the Project would implement limits on vehicle access through known archaeological sites and a plan would be in place in the event of inadvertent discovery of an archaeological resource.

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

While the CRI and XPI did not identify areas with known human remains, inadvertent discovery of human remains may still occur. In the event that human remains are encountered during construction, impacts would be potentially significant.

Mitigation

Implementation of Mitigation Measure CR-5 would reduce impacts to archaeological resources or human remains by requiring procedures that shall be taken in the event of inadvertent discovery.

Mitigation Measure CR-5: Inadvertent Discovery of Human Remains

If human remains are discovered during Project construction, work shall stop at the discovery location, within 66 feet, and any nearby area reasonably suspected to overlie adjacent to human remains (PRC, Section 7050.5).

- Notification shall be made to the Humboldt County Coroner (CCR 15064.5(e) (1) (A); HSC Sec.7050.5).
- Notification shall also be made to the three Wiyot Tribes (the Bear River Band of the Rohnerville Rancheria, the Blue Lake Rancheria, and the Wiyot Tribe of Loleta).
- If the coroner determines the remains to be Native American, the Coroner shall contact the NAHC within 24 hours and collaboratively determine the Most Likely Descendant (CCR 15064.5(e)(1)(B)).

The descendants or most likely descendants of the deceased shall be contacted, and work shall 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-5 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.

4.6 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 (Requirements to Reduce Air Pollution), which limits equipment idling. 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

The Project would not lead to a need for additional staffing of the District because the Project would retrofit wastewater lines that are already in place. The Project would not result in an increase in operational energy demand or usage. Therefore, the Project is not anticipated to result in an increase in operational emission above existing conditions and would result in no impact.

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

The McKinleyville Area Local Coastal Plan and the McKinleyville Community Plan do not include elements related to energy (Humboldt County 2014, Humboldt County 2018). However, the Humboldt County General Plan has an energy element that would apply within the Project Area (Humboldt County 2017). At the time of writing this document, there is an additional draft document that would apply to the Project: The Humboldt Regional Climate Action Plan (RCAP) (Humboldt County 2025b). The RCAP establishes a target of 40 percent reduction in greenhouse gas (GHG) emissions below 1990 levels by 2030 through efforts including energy efficiency standards. Implementation of the Project would not obstruct a local or 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 local energy policies or the broader energy goals of the state.

The majority of California's energy-related plans are not directly applicable to the Project or its operations. Operationally, the Project would not adversely impact operational wastewater treatment or automobile-related energy consumption. The Project would replace three existing gravity wastewater pipes, which would not require energy use to operate in excess of existing conditions. The Project would, therefore, not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact would result.

4.7 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?		✓		

Regional geology is influenced by the Mendocino Triple Junction, which is located approximately 50 miles southwest of the Project Area. The Mendocino Triple Junction is geologically active, and small earthquakes or other seismic activity are relatively common in the greater Project vicinity. Portions of the Middle Crossing Site are located directly on the Mad River Fault Zone, an active Holocene thrust fault that has moved during the past 11,700 years (DOC 2025).

The Project Area is comprised of approximately 82 percent of 226 Arcata and Candymountain soils, 2 to 9 percent slopes and approximately 13 percent Lepoil-Candymountain complex, 2 to 15 percent slopes. Four other soil associations that each cover less than 10 percent of the Project Area are listed in the Custom Soil Resource Report located within Appendix C.

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. (Less Than Significant Impact)

According to the California Geological Survey (CGS), the Middle Crossing Site is located on the Mad River Fault Zone, an Alquist-Priolo Fault (CGS 2025). The Alquist-Priolo Earthquake Fault Zoning Act was passed by the California

Legislature to mitigate the hazard of surface faulting to structures. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act addresses only the hazard of surface fault rupture and is not directed toward other earthquake hazards.

The Project would retrofit the three sewer crossings, which would increase earthquake resiliency. In the event of an earthquake or fault rupture, pipelines could potentially be affected or ruptured in severe scenarios. HDPE pipe would be used where the sewer crosses a known fault, as the durability and flexibility of HDPE makes the material more likely to withstand future earthquakes or fault movement. Furthermore, as part of the Project a geotechnical investigation would occur throughout the Project Area which would inform Project design. The Project would not change the exposure of people or structures to risk of loss, injury, or death from fault rupture. Thus, a less than significant impact would occur.

a, ii) Strong seismic ground shaking? (No Impact)

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. 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 (DOC 2025).

The Project would increase the resiliency of the three wastewater lines by design. Project implementation would not increase the risk of strong seismic ground shaking or exposure to strong seismic ground shaking above existing conditions. The Project does not include structures for human occupancy and therefore the Project would not expose people to strong seismic ground shaking above and beyond existing conditions. Therefore, no impact would occur.

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 caused by intense ground shaking (i.e., seismic events). 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. Only a portion of the Southern Crossing Site is located in a mapped area of potential liquefaction (Figure 7). This area would include portions of the HAB site and pipe alignment. The Middle and Northern Crossing Site are outside the mapped area of potential liquefaction. Project implementation would not increase the risk of liquefaction or exposure to liquefaction above existing conditions because liquefaction is caused by ground shaking (i.e., seismic events), and the Project does not propose elements that would cause ground shaking. Therefore, a less than significant impact regarding liquefaction would occur.

The Project Area is generally flat and located well away from any significant slopes. There is no evidence of recent active landslides and slope stability is considered relatively stable (Humboldt County 2025a). 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), due to the high percentages of silicate clays. Expansive soils can also be defined as those with a Plasticity Index (PI) of greater than 12 (Caltrans 2023). Mapping by the U.S. NRCS provides the PI of the average of all soils in a profile within the Project Area, which are summarized in Table 4.7-1 below (Appendix C).

Table 4.7-1 Plasticity Index of Soils in Project Area

Soil Type	Plasticity Index	Acres in the Project Area	Percent of Project Area	Expansive (Yes/No)
Halfbluff-Tepona-Urban Land, 0 to 2 percent slopes	1.7	0.6	3.6	No
Halfbluff-Tepona-Urban Land, 2 to 9 percent slopes	3.7	0.1	0.9	No

Soil Type	Plasticity Index	Acres in the Project Area	Percent of Project Area	Expansive (Yes/No)
Talawa, 0 to 2 percent slopes	5.4	0.0	0.0	No
Megwil and Cannonball soils, 0 to 5 percent slopes	12.6	0.2	1.2	Yes
Arcata and Candymountain soils, 2 to 9 percent slopes	5.6	12.4	81.7	No
Lepoil-Candymountain complex, 2 to 15 percent slopes	15.4	1.9	12.6	Yes

Therefore, the Megwil and Cannonball soils and Lepoil-Candymountain complex soils are considered expansive. These soils are located at each Crossing Site:

– Northern Crossing Site: HAB and pipe alignment.
– Middle Crossing Site: Pipe alignment.
– Southern Crossing Site: HAB and pipe alignment.

As noted above, the Project does not include structures for human occupancy and no changes to land uses would occur under the Project. Although there is the potential for unstable soils due to the high clay content and associated expansive nature at the HAB sites and along the pipe alignment, the Project would not create unsafe conditions. Therefore, these potential impacts would be less than significant.

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

Construction activities, including the operation of heavy machinery, would disturb soil and, therefore, have the potential to cause erosion. However, the Project's ground disturbance is limited due to HAB pipeline installation, staging areas, and temporary site access routes.

Additionally, the Project would install erosion control measures prior to ground disturbance that may include, but not be limited to, silt fences, straw wattles, soil stabilization controls, site watering for controlling dust, and sediment detention basins. Compliance with existing regulations requires development and implementation of a SWPPP in accordance with the State General Construction Permit (See Section 2.5). 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, with incorporation of the SWPPP, 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 is a wastewater line retrofit. The sewer lines would connect to the District's existing treatment facility and would not involve septic tanks or alternative wastewater disposal systems. No impact would occur.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less Than Significant Impact 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. State law requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (PRC Section 30244).

As shown in Table 4.7-1, the majority of the Project is comprised of Arcata and Candymountain soils. This soil type consist of parent materials of marine deposits derived from sedimentary rock (NRCS 2025). The soil horizons associated with this soil type are developed and contain mineral soil; however, due to the marine parent material it is

possible that paleontological resources may be encountered. Therefore, the impact related to the potential disturbance or damage of previously undiscovered paleontological resources, if present, is considered potentially significant.

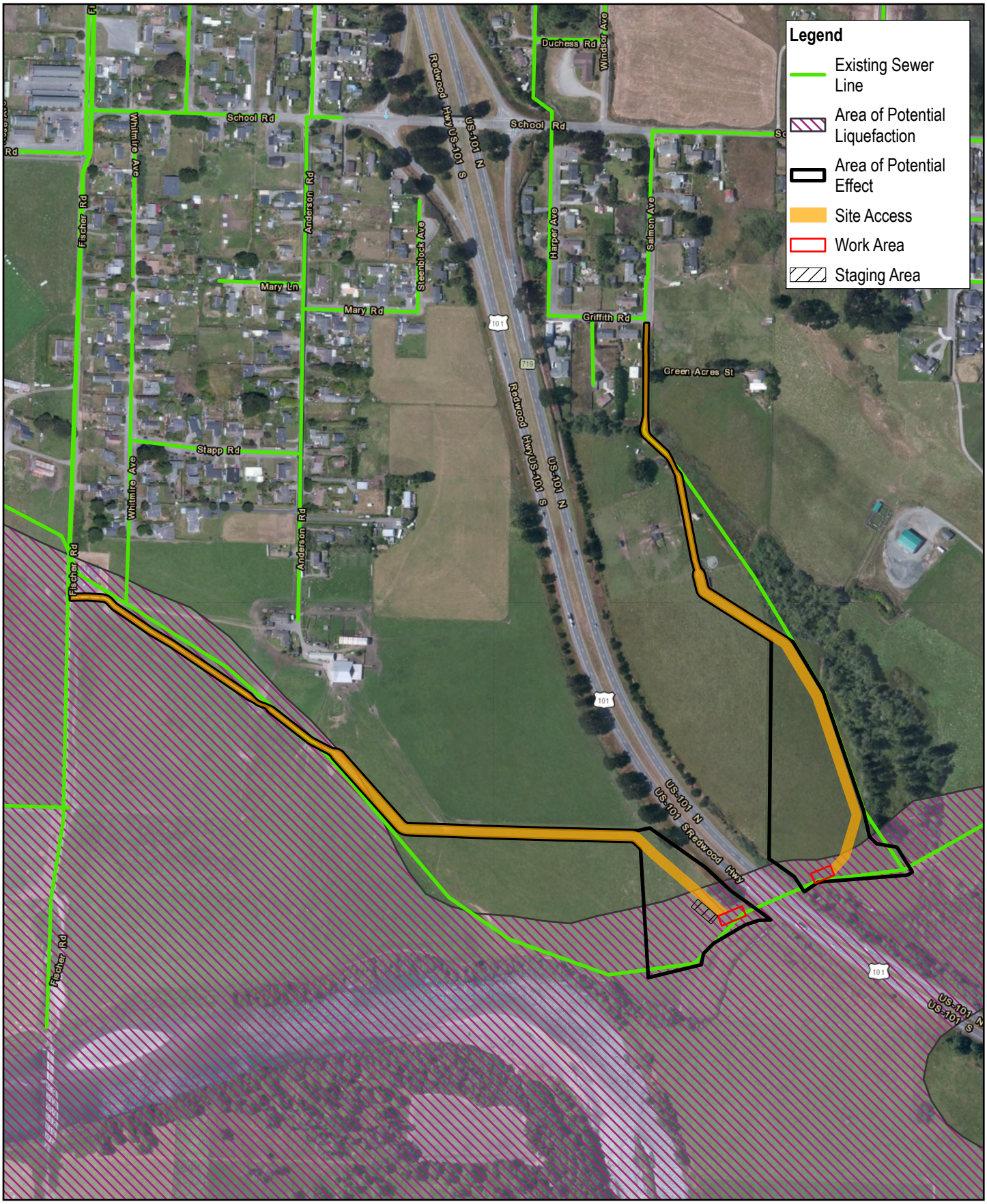
Mitigation

Implementation of Mitigation Measure GEO-1 would reduce the impact of construction activities on potentially unknown paleontological resources 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.

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



Paper Size ANSI A

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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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GHD

McKinleyville Community Services District
Sewer Highway Crossings Retrofit

Project No. **12669030**
Revision No. **-**
Date **Oct 2025**

Areas of Potential Liquefaction

FIGURE 7

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Print date: 13 Oct 2025 - 17:37

Data source: World_Transportation: Esri, HERE, iPC
World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community
World Imagery: Maxar. Created by: ctuck

4.8 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 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 BAAQMD for projects within Humboldt County. The BAAQMD's Justification Report for the adopted greenhouse gas thresholds identify the thresholds as specific for 'development projects' of commercial/residential development and other projects. Per the 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.*

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)*

Thus, the BAAQMD and NCUAQMD do not have recommended thresholds of significance to apply to construction period emissions. However, emissions that would occur during construction were quantified and are disclosed for informational purposes. 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 CalEEMod version 2022.1.1.30 and were estimated to be approximately 159 $MTCO_2e$ in 2026 and 184 $MTCO_2e$ for 2027 from all construction activities, which is consistent with construction of similar sized projects in the state. Construction-related GHG emissions would be temporary in nature and would only occur for the duration of construction and a less than significant impact would occur. The BAAQMD CEQA Guidelines identify thresholds of significance for use in

determining whether Project operation would have a significant impact. Required maintenance of the Project would be similar to existing conditions with regard to GHG emissions. Therefore, the Project would not generate an increase in operation-related emissions. Estimated Project emissions of 159 $MTCO_2e$ in 2026 and 184 $MTCO_2e$ for 2027 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) 2022 Scoping Plan identifies a path to meet the SB 32 GHG, as well as reducing anthropogenic GHG emissions to 85 percent below 1990 levels by 2045, and achieving carbon neutrality by 2045 or earlier, consistent with Assembly Bill 1279 (AB 1279). The 2022 Scoping Plan includes measures to move to a zero-emissions (decarbonized) transportation sector and phasing out the use of natural gas in residential and commercial buildings. The 2022 Scoping Plan would also reduce emissions of short-lived climate pollutants (SLCPs) and includes mechanical CO_2 removal and carbon capture and sequestration actions, as well as natural working lands management and nature-based strategies. The plan's measures are identified in Table 2-2 and Table 2-3 of the 2022 Scoping Plan. The measures are statewide and programmatic in nature. The 2022 Scoping Plan is largely advisory, as CARB does not directly regulate many of the sectors identified by the plan's measures.

The 2022 Scoping Plan states that local action by municipalities can support and amplify efforts to reduce GHGs. Local government decisions play a critical role in supporting state level measures to contain the growth of GHG emissions associated with the transportation system and the built environment. Local actions, provided in Appendix D of the 2022 Scoping Plan, are not required by statutory or gubernatorial direction, and are not binding, but contain guidance and information regarding actions that other jurisdictions may choose to take that complement the 2022 Scoping Plan measures. However, the 2022 Scoping Plan measures are broad policy and regulatory initiatives that would be implemented at the state level and do not relate to the construction and operation of individual projects such as the Project.

The Project is analyzed for consistency with the 2022 Scoping Plan in Table 4.8-1.

Table 4.8-1 Consistency Analysis between Project and 2022 Scoping Plan

Scoping Plan Sector and Action	Consistency/Applicability Determination
GHG Emissions Reductions Relative to the SB 32 Target 40 percent below 1990 levels by 2030.	Not Applicable This is a statewide measure that cannot be implemented by the Project or lead agency.
Smart Growth / Vehicle Miles Traveled (VMT) VMT per capita reduced 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045.	Not Applicable This is a statewide measure and VMT reduction goal that is not applicable to all individual projects due to regional variations and growth projections. Additionally, the Project would not increase staffing of the District, increase population in the area, or result in an increase in operational trips.
Light-duty Vehicle (LDV) Zero Emission Vehicles (ZEVs) 100 percent of LDV sales are ZEV by 2035	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.
Truck ZEVs 100 percent of medium-duty (MDV)/HDV sales are ZEV by 2040 (AB 74 University of California Institute of Transportation Studies [ITS] report).	Consistent. This is a statewide measure that cannot be implemented by the Project or lead agency. However, the standards would be applicable to the trucks that would access the Project Area during operation.
Aviation 20 percent of aviation fuel demand is met by electricity (batteries) or hydrogen (fuel cells) in 2045. Sustainable aviation fuel meets most or the rest of the aviation fuel demand that has not already transitioned to hydrogen or batteries.	Not Applicable This is a statewide measure that cannot be implemented by the Project or lead agency. The Project does not involve an aviation uses.

Scoping Plan Sector and Action	Consistency/Applicability Determination
Ocean-going Vessels (OGV) 2020 OGV At-Berth regulation fully implemented, with most OGVs utilizing shore power by 2027. 25 percent of OGVs utilize hydrogen fuel cell electric technology by 2045.	Not Applicable The Project does not involve an OGV.
Port Operations 100 percent of cargo handling equipment is zero emission by 2037. 100 percent of drayage trucks are zero emission by 2035.	Not Applicable The Project does not involve a port.
Freight and Passenger Rail 100 percent of passenger and other locomotive sales are ZEV by 2030. 100 percent of line haul locomotive sales are ZEV by 2035. Line haul and passenger rail rely primarily on hydrogen fuel cell technology, and others primarily utilize electricity.	Not Applicable The Project does not involve freight or passenger rail.
Oil and Gas Extraction Reduce oil and gas extraction operations in line with petroleum demand by 2045.	Not Applicable The Project does not involve oil or gas extraction.
Petroleum Refining CCS on majority of operations by 2030, beginning in 2028. Production reduced in line with petroleum demand.	Not Applicable The Project does not involve or petroleum refining.
Electricity Generation Sector GHG target of 38 million metric tons of carbon dioxide equivalent (MMTCO2e) in 2030 and 30 MMTCO2e in 2035. Retail sales load coverage. 20 gigawatts (GW) of offshore wind by 2045. Meet increased demand for electrification without new fossil gas-fired resources.	Not Applicable This measure would apply to electricity providers. The Project is not an electricity provider.
New Residential and Commercial Buildings All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.	Not Applicable The Project does not include residential or commercial buildings.
Existing Residential Buildings 80 percent of appliance sales are electric by 2030 and 100 percent of appliance sales are electric by 2035. Appliances are replaced at end of life such that by 2030 there are 3 million all electric and electric-ready homes – and by 2035, 7 million homes – as well as contributing to 6 million heat pumps installed statewide by 2030.	Not Applicable This is a measure for the state to modify its requirements for appliance sales to affect energy efficiency of existing residential buildings. The Project would not include appliance manufacturing or sales or continued use of existing residential buildings.

Scoping Plan Sector and Action	Consistency/Applicability Determination
Existing Commercial Buildings 80 percent of appliance sales are electric by 2030, and 100 percent of appliance sales are electric by 2045. Appliances are replaced at end of life, contributing to 6 million heat pumps installed statewide by 2030.	Not Applicable The Project would not include continued use or existing commercial buildings.
Food Products 7.5 percent of energy demand electrified directly and/or indirectly by 2030; 75 percent by 2045.	Not Applicable The Project does not include agricultural or mass food production.
Construction Equipment 25 percent of energy demand electrified by 2030 and 75 percent electrified by 2045.	Not Applicable Although the Project would involve the use of construction equipment, construction would occur in 2026, prior to the electrification goal. Additionally, the Project would not own the construction fleet used.
Chemicals and Allied Products; Pulp and Paper Electrify 0 percent of boilers by 2030 and 100 percent of boilers by 2045. Hydrogen for 25 percent of process heat by 2035 and 100 percent by 2045. Electrify 100 percent of other energy demand by 2045.	Not Applicable This measure would apply to the energy sources for pulp and paper manufacturers. The Project is not pulp or paper manufacture.
Stone, Clay, Glass, and Cement CCS on 40 percent of operations by 2035 and on all facilities by 2045. Process emissions reduced through alternative materials and CCS.	Not Applicable This measure would apply to the direct GHG emissions from CCS industries. The Project is not a CCS industry.
Other Industrial Manufacturing 0 percent energy demand electrified by 2030 and 50 percent by 2045.	Not Applicable This measure would apply to the energy sources for industrial manufacturers. The Project is not an industrial manufacturer.
Combined Heat and Power Facilities retire by 2040.	Not Applicable This measure would apply to the existing combined heat and power energy facilities. The Project is not combined heat and power facility.
Agriculture Energy Use 25 percent energy demand electrified by 2030 and 75 percent by 2045.	Not Applicable The Project does not directly include agricultural production.
Low Carbon Fuels for Transportation Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen.	Not Applicable This measure would apply to the bulk fuel providers The Project is not a fuel provider.
Low Carbon Fuels for Buildings and Industry In 2030s blended in pipeline. Renewable hydrogen blended in fossil gas pipeline at 7 percent energy (~20 percent by volume), ramping up between 2030 and 2040. In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters.	Not Applicable This measure would apply to natural gas utilities and energy providers. The Project is not an energy provider.

Scoping Plan Sector and Action	Consistency/Applicability Determination
Non-combustion Methane Emissions Increase landfill and dairy digester methane capture. Some alternative manure management deployed for smaller dairies. Moderate adoption of enteric strategies by 2030. Divert 75 percent of organic waste from landfills by 2025. Oil and gas fugitive methane emissions reduced 50 percent by 2030 and further reductions as infrastructure components retire in line with reduced fossil gas demand.	Consistent The Project does not include a landfill or dairy. The Project would reduce construction waste with implementation of state mandated recycling and reuse mandates.
High GWP Potential Emissions Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions.	Not Applicable The Project does not include refrigerant use.

Source of Scoping Plan Reduction Measures: CARB 2022

As shown in the table, the Project is consistent the actions for the Scoping Plan scenario outlined in 2022 Scoping Plan for AB 32 GHG inventory sectors. Therefore, the Project would not conflict with AB 1279 or the 2022 Scoping Plan and would result in no impact.

4.9 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?				✓

A regulatory database review of available online government records was evaluated within the Project Area to determine the presence and location of existing and/or historical soil and groundwater contamination, including the SWRCB's Geotracker and California Department of Toxic Substances Control (DTSC), EnviroStor. The regulatory database review was completed to identify contamination that could potentially pose an exposure risk to humans and/or the environment.

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)

Project construction would involve excavation for replacement and installation of the wastewater pipes. This process would necessitate the transportation and utilization of standard hazardous materials inherent in construction, including petroleum products like fuel and lubricants for construction equipment and vehicles. These materials are commonly utilized in construction, pose no immediate hazard, and would be employed in limited quantities.

Compliance with a comprehensive network of local, state, and federal laws is mandatory for the storage, handling, and transportation of hazardous materials. The use of hazardous materials during Project construction would be subject to relevant regulations, such as California Health and Safety Code Section 25531, Division 20, Chapter 6.5, and other standards enforced by departments and boards under the California Environmental Protection Agency (Cal/EPA). The Project would adhere to Cal/EPA hazardous materials regulations consolidated under the Unified Program, administered by the DTSC, the SWRCB, NCUAQMD, and the Department of Resources Recycling and Recovery

(CalRecycle). Local Certified Unified Program Agencies (CUPAs), such as the Humboldt County Division of Environmental Health (HCDEH), oversee Unified Program enforcement, including inspections and compliance with hazardous materials regulations set forth by the Unified Program within the Project Area.

Worker exposure to hazardous materials would be regulated by the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA), ensuring worker safety through hazard communication regulations, worker training, and compliance with signage/postings requirements. Hazard communication protocols would include identifying and labeling hazardous substances, conveying information regarding storage, handling, and transportation of hazardous substances, and developing health and safety plans to safeguard employees.

Construction specifications for the Project would mandate hazardous materials management in accordance with applicable laws and regulations. Contractors would be responsible for containing hazardous materials, preventing worker, public, and environmental exposure during construction, and legally disposing of potential generated hazardous materials (which is not anticipated to occur).

Project construction would be required to implement stormwater management requirements during construction in accordance with the SWRCB's Construction General Permit. 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 4.10 – Hydrology and Water Quality.

The regulatory framework and construction protocols ensure appropriate risk mitigation and hazard protections, resulting in no significant hazard to the public or environment from hazardous materials during Project construction. Compliance with existing and future hazardous materials laws and regulations would mitigate the potential for significant hazards during construction.

Following construction, intermittent maintenance and repair would likely involve fuels or lubricants which are considered hazardous materials; however, the operational risk associated with these activities is low, resulting in no significant hazard to the public or environment during Project operation. This potential impact 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 construction-related tasks including grading, trenching, excavation, and transportation of materials. There is always the possibility that an accident could occur when operating equipment, accidentally releasing fuel. Spill kits would be immediately accessible in case of fuel or oil spills. Equipment would not be refueled within 50 feet of Norton Creek, Widow White Creek, Mill Creek, or any perennial wetland. If equipment must be washed, it would be washed off-site. Additionally, the HAB drilling would utilize a drilling fluid that would meet the stringent NSF 060 requirements, an extensive standard that establishes minimum health effect requirements for chemicals used in drinking water treatment. Therefore, this 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? (No Impact)

There are no schools located within one-quarter mile of the Project. The nearest school for the Northern Crossing Site is McKinleyville High approximately 0.5 miles southeast. The nearest school for the Middle Crossing Site is Morris Elementary approximately 0.4 miles northeast. The nearest school for the Southern Crossing Site is McKinleyville Middle School approximately 1.5 miles northeast. 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 above).

Because the schools are beyond one-quarter mile and the District 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, there would be no impact related to the use of hazardous materials and school during construction. Project operations would also have no impact.

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? (No Impact)

A search was conducted of hazardous materials sites compiled in accordance with Government Code Section 65962.5, which includes databases such as the DTSC, Envirostor database and the SWRCB GeoTracker database. The Project Area includes two sites mapped within 0.25 miles south of the Middle Crossing Site as mapped in the GeoTracker database. These two sites are associated with the gas station at 1021 Murray Road: Leaking Underground Storage Tank (LUST) T0602300329 and LUST T0602389275 (SWRCB 2025). These sites were closed in 1993 and 2006, respectively. Off-site construction activities are not planned, and impacts related to these two off-site closed LUST sites would not occur. The Project Area is also not located on a site listed in the DTSC EnviroStor database or within 0.5 miles. Given that the Project is not in proximity to an active hazardous materials site, there would be no significant risk posed to the public or the environment from implementation of the Project, resulting in no impact.

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project Area? (No Impact)

The nearest airport is the California Redwood Coast-Humboldt County Airport (ACV), which is located approximately 1.3 miles north of the Northern Crossing Site. The ACV is covered by the 2021 Airport Land Use Compatibility Plan (ALUCP) prepared for the Humboldt County Airport Land Use Commission (ALUC) (ESA 2021). The entirety of the Northern Crossing Site is located within Inner Approach/Departure Zone Safety Zone 2, Inner Turning Zone Safety Zone 3*, and Airport Traffic Pattern Zone Safety Zone 6. However, the Project elements located within Safety Zone 2 and Safety Zone 3* are associated only with an access road to the HAB area and no impact would occur. The Northern Crossing Site HAB work areas and staging areas are located entirely within Safety Zone 6. Compatible uses within Safety Zone 6 includes utilities (communication, power, and water transmission facilities and infrastructure), which indicates uses acceptable without safety-related conditions (ESA 2021). Therefore, no impact would result.

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

The Project Area is covered under the 2015 Humboldt County Emergency Operations Plan (EOP). The Humboldt County EOP identifies the emergency response and evacuation policies and procedures for hazards related to earthquake, tsunami, extreme weather, flooding/flash flooding, landslides, transportation accidents, hazardous materials, interface wildland fire, energy shortage, offshore toxic spill, civic disturbance, terrorist activities, and national security (Humboldt County 2015).

The Humboldt County EOP establishes a structure for Humboldt County Operation Area agencies to respond to large-scale emergencies requiring multiagency participation or activation of the Humboldt County Emergency Operations Center (EOC) (Humboldt County 2015). Hazard mitigation and risk assessment strategies for Humboldt County Operation Area are formalized in the Humboldt County Operational Area Hazard Mitigation Plan (HMP) (Humboldt County 2025c).

The Project would not impair implementation or physically interfere with the established Humboldt County EOP, or Humboldt County HMP because the Project would not block roadways or other access points that may be needed by emergency vehicles. The Project would also increase reliability of wastewater infrastructure following a severe earthquake event. Therefore, 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? (No Impact)

The Project does not include structures or other recreation components that would expose people or structures to loss, injury, or death due to wildland fires. Therefore, no impact would occur. For more detailed information on the Project's potential impact to exacerbate wildland fire risk, refer to Section 4.20 – Wildfire.

4.10 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 within the Mad River watershed in the North Coast Hydrologic Region. It is underlain by groundwater basin numbers 1-008.01 and 1-008.02, Mad River Valley Lowland and Mad River Valley Dows Prairie School Area respectively, which are not mapped by the Environmental Protection Agency (EPA) as sole source aquifer recharge areas and are not identified as overdrafted groundwater basins (DWR 2025). Except for the Middle Crossing Site, portions of the Project Area are located within the FEMA flood zone. The Project is proximal to portions of Norton, Widow White, and Mill creeks, which are tributaries of the Mad River and ultimately drain into the Pacific Ocean. 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 Impact with Mitigation)

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 proposed Project is anticipated to disturb over one acre of land; therefore, compliance with State Water Board Order No. 2022-0057 would be required, which would regulate stormwater runoff from Project construction activities. Project operations would obtain coverage under SWRCB's Order No. 2022-0057-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities. 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 (See Section 2.5).

The Construction SWPPP would be written by a Qualified SWPPP Developer (QSD) and would identify and specify the use of erosion control measures, 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 erosion control measures 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.

The greatest potential Project impacts to water quality would result from sediment mobilization during construction and operations, or a frac-out during HAB drilling. Construction and operation activities such as site clearing, grading, excavation, and material stockpiling could leave soils exposed to rain or surface water runoff that may carry soil contaminants (e.g., nutrients or other pollutants) into wetlands and/or waterways near the site, degrade water quality, and potentially violate water quality standards for specific chemicals, dissolved oxygen, suspended sediment, or nutrients. This impact would be potentially significant. HAB drilling has the potential to release drilling fluids into the surface environment through frac-outs. A frac-out is a condition where drilling mud is released through fractured soils and bedrock into the surrounding rock and sand, which travels to the surface. Even though all additives would meet NSF 060 requirements, this impact would also be potentially significant.

Mitigation

Implementation of Mitigation Measure HWQ-1 would reduce impacts to surface or ground water quality by requiring a plan in the event of a frac-out.

Mitigation Measure HWQ-1: Development of a HAB Hydrofracture Contingency Plan

To avoid potential impacts related to a frac-out, construction specifications shall require preparation of a HAB Hydrofracture Contingency Plan, which shall be approved by the District and in place prior to construction. The Plan shall include an anticipated drilling mud design that provides engineering properties and the anticipated fluid pressure required as the pilot hole is incrementally advanced in approximately 10-meter (30-foot) increments. The contractor shall be required to monitor and record the driller's mud composition, drill fluid pressure and volumes, and have an inadvertent return contingency plan and associated equipment to minimize impacts. The driller's mud, spoils, water, and all other waste materials are to be legally disposed with weight or volume tickets confirming legal disposal. The Plan shall include visual monitoring, monitoring pressures and volumes, observation during drilling, standards and specification for a four-hour shutdown minimum if frac-out occurs to allow ground to heal, cleanup plan, frac-out tank or vac truck (placed in strategic locations), and roles and responsibilities in the event of a frac-out event.

Implementation of measures summarized in Section 2.5, combined with Mitigation Measure BIO-6 and HWQ-1, would mitigate potential impacts related to violations of water quality standards and waste discharge requirements to a less than significant level by appropriately managing construction dewatering and implementing erosion control measures near streams and other wetted waters of the U.S. or state and developing a contingency plan to avoid environmental impacts resulting from a frac-out during HAB drilling.

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 Mad River Valley – Dows Prairie School Area Basin (1-008.02), which has a Sustainable Groundwater Management Act (SGMA) Basin Priority of Very Low and is not listed as Critically Overdrafted (DWR 2025). Contractor-supplied water would be used during construction for dust suppression on work areas. Use of groundwater is not necessary to construct the Project. Similarly, the Project would not decrease groundwater supplies or interfere with groundwater management. During construction, isolated and short duration groundwater dewatering may occur as needed and would be small in scale and limited to shallow groundwater only. Construction-related impact on groundwater levels would not result.

Following construction, the Project would not utilize groundwater or result in an increase in population or employment that would indirectly increase groundwater demand. Therefore, the Project would not create a deficit in aquifer volume or a lowering of water levels. The Project is not expected to result in any change in the use or recharge of groundwater. No impact would occur.

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)

Drainage patterns would not be permanently altered as a result of the Project, nor would the Project substantially increase impervious surfaces. With the exception of the utility access covers, all Project elements are located below the ground surface. Construction would not alter topography (e.g., disturbed areas would be restored to the same slope of existing conditions). Project elements would not result in significant alteration of the existing drainage pattern of the site.

Replacement subsurface piping is proposed to cross under the unnamed tributary for Norton Creek at the Northern Crossing Site. As mentioned in Section 2.2 (Construction Details), construction would be limited to dry months when there is low risk of the creeks flooding into the Project Areas. The Project's design would account for any necessary considerations for flood resiliency. Additionally, the piping would be located approximately 7 feet below the Norton Creek tributary. No in-water work and no dewatering of surface waters would occur.

Erosion control and sediment prevention would be implemented during construction to avoid impacts to water quality, including those related to siltation (See Section 4.10 (a) above). The Project would be required to adhere to erosion control measures and conditions to be included in a SWPPP (See Section 2.5) and CWA Section 401 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 potential 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 not substantially increase impervious surfaces or substantially alter topography, slope, or drainage to or near the Mad River, Norton Creek, Widow White Creek, Mill Creek, or any other tributary. A substantial change in grade that would increase drainage or erosion potential would not occur. With the exception of the utility access covers, all Project elements are located below the ground surface. Both on-site and off-site flooding would remain unaffected. No impact would result.

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 Impact)

The Project would not substantially increase the area of impervious surface. The Project also does not include elements that would increase stormwater drainage or necessitate significant design features to accommodate

stormwater management. The Project would be required to adhere to erosion control measures and conditions to be included in a SWPPP (See Section 2.5) to prevent erosion-related impacts during construction, and the Project would be designed to meet applicable storm water requirements. The impact would be less than significant.

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

A majority of the Northern Crossing Site is located within the FEMA 100-year floodplain of Widow White Creek and Norton Creek, and portions of the Southern Crossing Site are located within the 100-year floodplain of the Mad River (Humboldt County 2025a, Figure 8.1 through Figure 8.3).

Construction of the Northern Crossing Site would be limited to dry months when there is low risk of the creeks flooding into the Project Areas and the Project's design would account for any necessary considerations for flood resiliency. Additionally, all Project elements would be located at or below grade and would not impede or redirect flood flows. Existing topography would not be significantly altered in such a manner as to redirect flood flows. The underground pipes would not impede or redirect flood flows because they would be below ground surface. The potential impact would be less than significant.

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

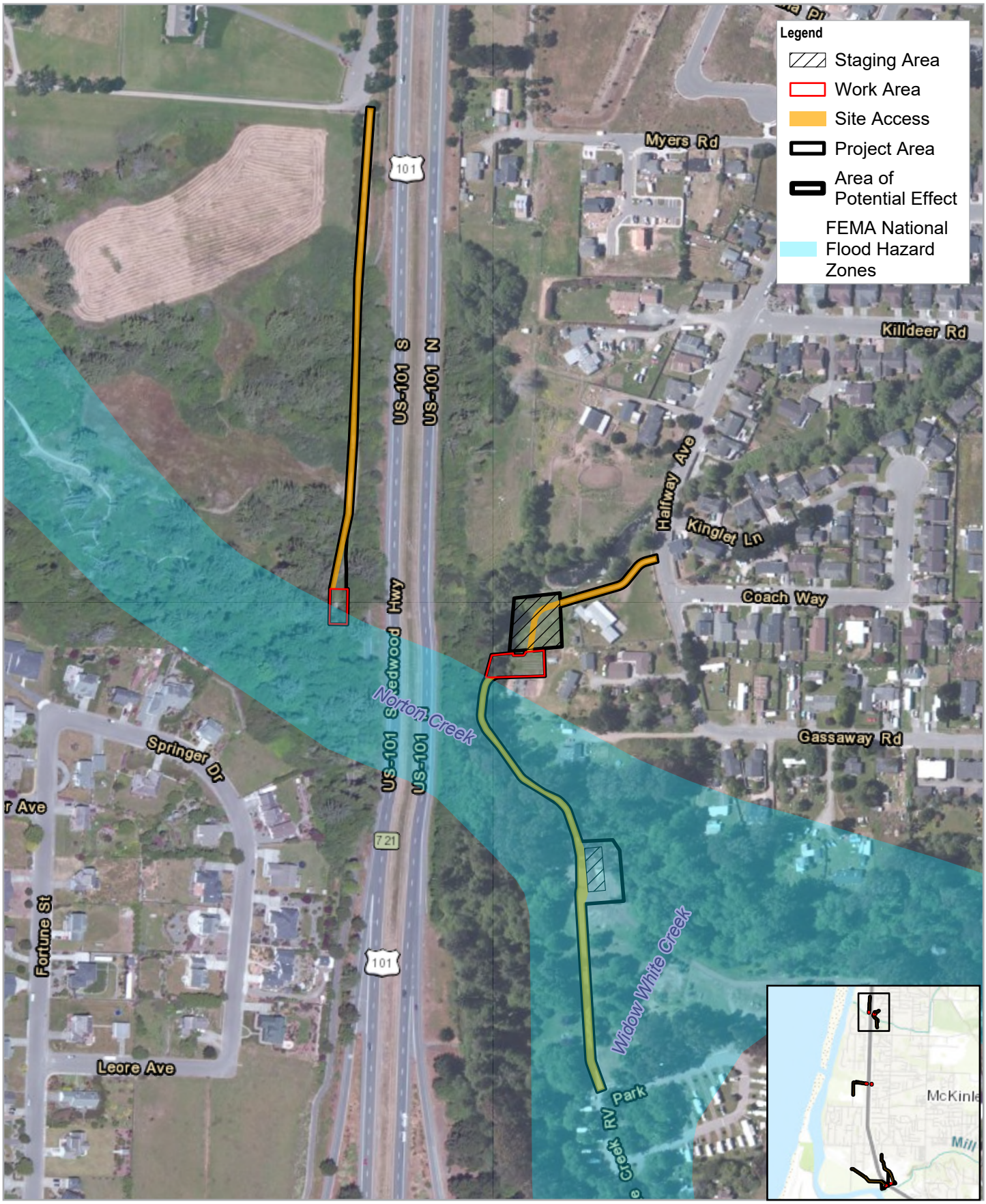
The Project Area is not located within a tsunami hazard zone (Humboldt County 2025a).

The Project Area is not located near a larger isolated body of water that may be affected by a seiche and, therefore, no impact from a seiche would occur.

Construction of the Northern Crossing Site would be limited to the dry summer and early fall months and would, therefore, not occur during typical flood conditions. Thus, there would be no potential for a flood-related release of pollutants during construction. In the event of a very significant flood that might inundate, scour, or wash away wastewater infrastructure, the flood magnitude associated with such an event would be both uncommon and substantial. Thus, the risk of releasing operational related wastewater pollutants as a result of a flood 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 Basin Plan, which establishes thresholds for key water resource protection objectives for both surface waters and groundwater. If required, the Project would obtain coverage under SWRCB's Order No. 2022-0057-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, which would include a SWPPP. If impacts to waters or wetlands would occur, the Project would also obtain a NCRWQCB CWA Section 401 Water Quality Certification. These regulatory requirements and associated requisite monitoring would ensure a conflict with the Basin Plan does not occur. No impact would result.



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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
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GHD

McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

FEMA Flood Zones
Northern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 8.1

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Data source: World_Transportation: Esri, HERE, iPC; World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS; World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, USDA; World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community; World_Transportation: Esri, HERE. Created by: ctuck



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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

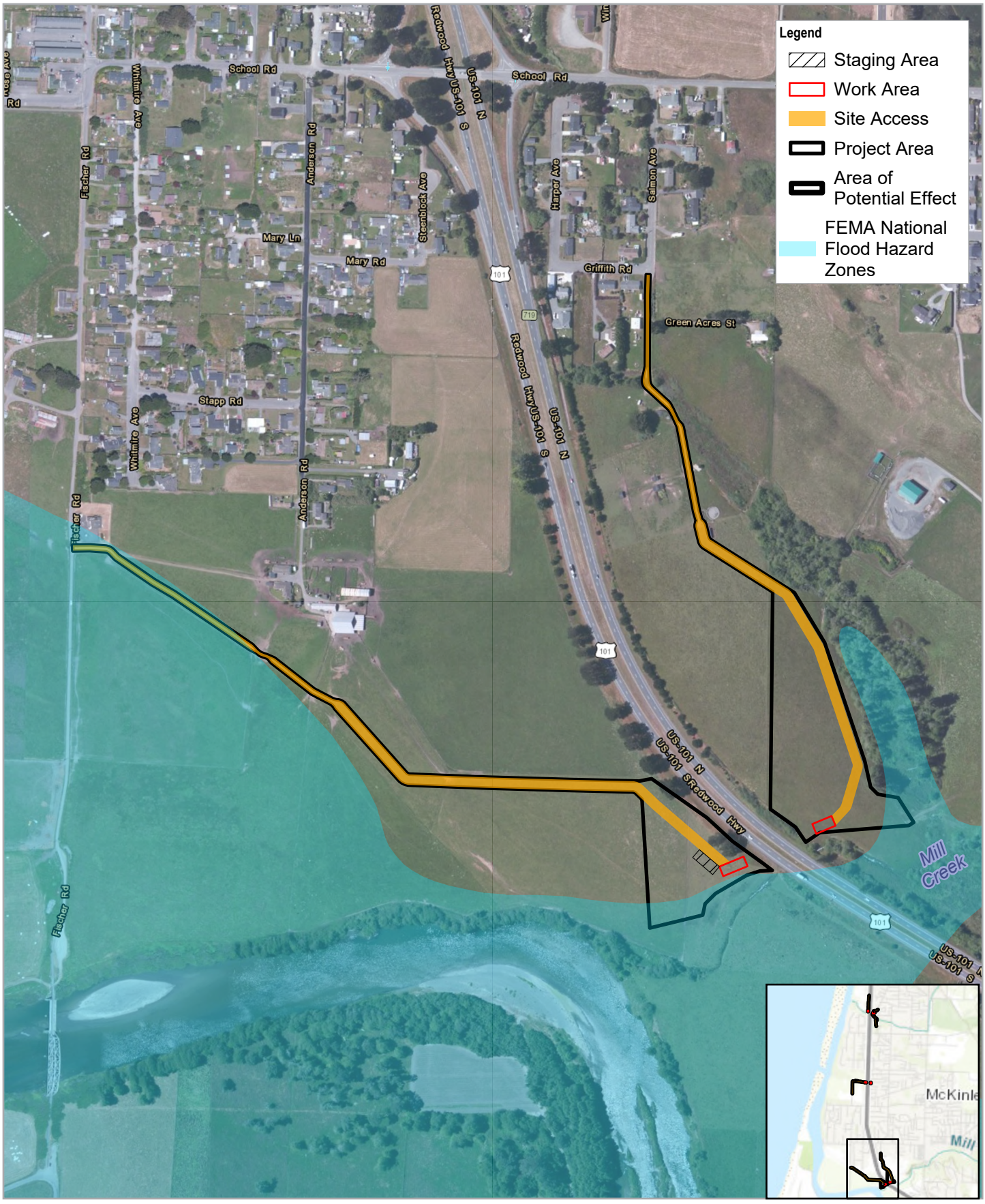
FEMA Flood Zones
Middle Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 8.2

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Data source: World_Transportation: Esri, HERE, iPC; World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS; World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, EPA, USDA; World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community; World_Transportation: Esri, HERE. Created by: ctuck



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Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California I FIPS 0401 Feet

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McKinleyville Community Services District
Sewer Highway Crossings Retrofit
Wetland Delineation Report

FEMA Flood Zones
Southern Crossing Site

Project No. **12669030**
Revision No. **-**
Date **Nov 2020**

FIGURE 8.3

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Data source: World_Transportation: Esri, HERE, iPC; World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS; World Topographic Map: Bureau of Land Management, Esri, HERE, Garmin, USGS, METI/NASA, EPA, USDA; World Imagery (Clarity): Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community; World_Transportation: Esri, HERE.
Created by: ctuck

4.11 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 is located within McKinleyville, and portions of the Project Area are within the Coastal Zone. Therefore, the Project is subject to the 2007 McKinleyville Area Local Coastal Plan, 2018 McKinleyville Community Plan, and the 2017 Humboldt County General Plan as appropriate.

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

The proposed Project would not divide an existing neighborhood or community. The Northern Crossing Site would be accessed via Letz Avenue and the District's Letz Pump Station access road on the west side of U.S. 101 and Halfway Avenue on the east side of U.S. 101. The Middle Crossing Site would be accessed via a sewer utility ROW spur from the Hammond Trail west of U.S. 101 and Thiel Avenue on the east of U.S. 101. The Southern Crossing Site would be accessed through temporary access routes on both the west and east side of U.S. 101. During construction, the Hammond Trail, where necessary to support construction access, would be subject to temporary full closure to through travel. Thiel Avenue would also be subject to controlled one-way traffic during construction of the Middle Crossing Site, with a steel plate available to cover the HAB pit in the event of a need for emergency first responder access and during non-construction hours. This would be temporary and would not physically divide an established community. Following construction, the Project would be located entirely underground, and 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)

As defined in the 2007 McKinleyville Area Local Coastal Plan and 2018 McKinleyville Community Plan, the Project Area spans the following land use designations:

Agricultural Exclusive Prime (AEP)

Natural Resources (NR)

Residential / Low Density (RL)

Residential Estates (RE)

Public Facility (PF)

Residential Low Density 1-7 Dwelling Units Per Acre (RL1-7)

Commercial Recreational (CR)

Commercial Services (CS)

Airport Safety Review (AP)

The Project does not conflict with the McKinleyville Area Local Coastal Plan and McKinleyville Community Plan because it does not introduce new or conflicting land uses. As a result, implementation of the Project would not result in a significant environmental impact. The Project would retrofit existing wastewater lines while adhering to established land use designations and plans. Therefore, no impact would occur.

4.12 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? (No Impact)

The Project would require minor use of rock, gravel, sand, and other similar materials for construction. However, there are no active mines, no known areas with mineral resource deposits, and no mapped Surface Mining and Reclamation Act parcels within the Project Area (Humboldt County 2025a). Additionally, the Project Area is also not designated by the Humboldt County General Plan, McKinleyville Area Local Coastal Plan, McKinleyville Community Plan, or other local land use plans as having locally-important mineral resources within the Project Area (Humboldt County 2017; Humboldt County 2014, Humboldt County 2018). Thus, the Project would not have a significant impact on locally available minerals or mineral resources valuable to the region or the state. No impact would result.

4.13 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?				✓

Depending on the Crossing Site, current noise conditions in the Project Area primarily consist of road noise associated with vehicles on U.S. 101, recreationists utilizing the Hammond Trails, nearby residential homes, and the Mad River to the south. The nearest sensitive receptors for the Northern Crossing Site are residences located within 200 feet located at 3036 and 3030 Halfway Avenue and residents on Seahome Court. The nearest sensitive receptors for the Middle Crossing Site are residences located on Thiel Avenue with the closest residence located within 100 feet of the HAB installation at 2280 and 2290 Thiel Avenue. The nearest sensitive receptors for the Southern Crossing Site are residences approximately 0.3 miles north of the HAB installation on Salmon Avenue.

Per Appendix B of the McKinleyville Area Local Coastal Plan and Section 3240 of the McKinleyville Community Plan, the standards of the Humboldt County General Plan Noise Element can be used in an advisory role under CEQA for impact analysis. Standard N-S1 of the Humboldt County General Plan specifies that the Land Use/Noise Compatibility Standards shall be used as a guide to ensure compatibility of land uses (shown as Table 13-C in the Humboldt County General Plan), and Implementation Measure N-IM6 (Noise Control Ordinance) states that an ordinance shall be prepared, which would include definitions of excessive levels of noise for construction activities. As of the date of this IS/MND, the County has not adopted a noise ordinance with defined limits on noise levels at construction sites, or land use and noise compatibility standards for construction noise.

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 of the proposed Project would temporarily increase noise in the immediate vicinity of the Project Area resulting from use of construction equipment and increased traffic by construction workers who commute to and from the Project Area.

Construction is expected to require up to 12 months to complete and would occur between 7 a.m. to 7 p.m. Monday through Saturday. Noise impacts depend on type of construction equipment, timing, and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas near noise-sensitive land uses, or when construction lasts over extended periods of time. Equipment to be utilized on-site include racked excavators, backhoes, graders, bulldozers, dump trucks, drilling equipment, drill mud recycling equipment, pipe fusing equipment, cranes, water trucks, bobcats,

and pick-up trucks, and potentially other specialized equipment. Construction noise levels would vary based on the type of equipment as summarized in Table 4.13-1 below.

Table 4.13-1 Construction Equipment Reference Noise Levels as Measured at 50'

Equipment	Noise Level (dB[1])	Equipment	Noise Level (dB)
Drill rig truck	84	Grader	85
Horizontal Boring Hydraulic Jack	80	Large Generator	82
Front end loader or Backhoe	80	Crane (mobile or stationary)	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 4.13-1, the noise levels generated by construction equipment at the Project Area may reach a maximum of approximately 85 dB Leq at 50 feet during site excavation and construction.

Currently, Humboldt County has not established construction-related noise standards. Given that construction would be temporary and intermittent, would not include excessively noisy equipment, and would only occur during daytime hours, potential noise impacts generated during the construction phase would be less than significant.

Per Humboldt County General Plan Standard N-S1 and Table 13-C (Land Use/Noise Compatibility Standards) the Project is located throughout a variety of land use noise categories with the strictest standard for the Northern and Middle Crossing Site being the residential "normally acceptable noise levels" of approximately 60 dBA. The Southern Crossing Site is within the agriculture land use category, and the "normally acceptable noise levels" range from approximately 75 – 91+ dBA. Project operation includes use of wastewater pipelines. Noise generated from use of pipelines would not exceed 60 dBA. There would be no operational impact.

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

The County has 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 construction. Project construction activities, such as drilling and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity.

Table 4.13-2 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

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

increasing distance. Vibration levels would vary depending on soil conditions, construction methods, and equipment used.

Table 4.13-2 Typical Vibration Levels for Construction Equipment used during Project Construction (Caltrans 2020)

Equipment	Reference PPV at 25 ft. (in/sec)
Large Bulldozer	0.089
Caisson drilling	0.089
Loaded trucks	0.076
Jackhammer	0.035
Small bulldozer	0.003

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 would utilize HAB method of drilling. The proposed Project would comply with Humboldt County General Plan Implementation Measure N-IM6, which requires limiting construction activity to specified daytime hours and regulate vibration sources.

Vibration impacts to residences are anticipated to be minor and below the Caltrans advisory of 0.5 inches/second PPV for buildings that are found to be structurally sound but where structural damage is a major concern, as the closest residences are located approximately 100 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. Project operation would not generate vibration, except in instances where larger repairs to the wastewater lines 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.

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 ACV, which is located approximately 1.3 miles north of the Northern Crossing Site. ACV is covered by the 2021 ALUCP prepared for the Humboldt County ALUC, and the Project Area is not located within the ALUCP Noise Contours (ESA 2021). Therefore, Project construction would not exacerbate existing airport noise. No impact would result.

4.14 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?				✓

This section evaluates the Project's potential effect on population and housing. The 2020 population for the McKinleyville community was estimated to be 16,262 people with 7,414 housing units (U.S. Census 2020).

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 Project involves retrofitting the three gravity sewer lines with pipes that are more resilient to damage in a major earthquake and with a slightly larger capacity to handle larger storm event flows than the existing pipes. The Project's potential to influence population growth directly or indirectly in McKinleyville is minimal and no significant impact on population growth is anticipated from implementation of the Project.

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

The proposed Project does not involve demolition of any existing housing structures and would not displace any existing people or housing. No impact would occur.

4.15 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?				✓

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)

As detailed in Section 4.14 – Population and Housing, implementation of the Project would not directly or indirectly lead to an increase in population growth because the Project does not include construction of residences or roadways, expansion of the capacity outside of storm events, or other public services. Currently, fire protection services for the Project Area are provided by the Arcata Fire District, while police services are managed by the Humboldt County Sheriff's Office, aligning with the standard services offered across McKinleyville. The Project would not lead to a need for additional staffing by the District because the Project would retrofit wastewater lines that are already in place. No new hazards, alterations to the road network that could impede emergency service access, or need for additional schools would occur due to implementation of the Project. Additionally, the Project would have no impact on local parks because the Project does not overlap with a park, however, does overlap with a segment of the Hammond Trail, which is further discussed in Section 4.16. No impact to public services would occur.

4.16 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?				✓

Numerous recreational facilities exist within the Project vicinity. The Project Area includes a section of the Hammond Trail north of Hiller Road within the Middle Crossing Site. The Mad River is located directly to the south of the Southern Crossing Site but is not accessed via the Project Area.

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)

The Project does not include new or modified recreational amenities. Construction of the Project would temporarily restrict use of the Hammond Trail north of Hiller Road through a full closure. This restriction would last for up to four weeks and would not be long enough to create physical deterioration on the adjacent parks and recreational facilities. Thus, construction impacts would be less than significant.

After construction, the operation of the Project would allow Hammond Trail use consistent with current use and would have no effect on regional park use. Operationally, no impact would result.

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

The Project would temporarily close access of the Hammond Trail during construction of the Middle Crossing Site. This closure would be short-term in duration (approximately up to four weeks) and would not be significant to require the construction or expansion of recreational facilities. The Project would not create additional trails or recreational facilities beyond current use. No impact would result.

4.17 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 Area spans McKinleyville and within the Northern Crossing Site includes the southern terminus of Letz Avenue and Halfway Avenue between Kinglet Avenue and Coach Way. The Middle Crossing Site includes a sewer utility ROW spur from the Hammond Trail and Thiel Avenue between Forson Road and Kirkwood Court. The Southern Crossing Site includes the southern terminus of Fischer Avenue and Salmon Avenue.

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? (Less than Significant Impact)

The proposed Project would not include elements that constitute an extension of the roadway network. HAB installation would allow pipeline installation underneath roadways, including U.S. 101.

The Northern Crossing Site would be accessed via Letz Avenue and the District's Letz Pump Station access road on the west side of U.S. 101 and Halfway Avenue on the east side of U.S. 101. The Middle Crossing Site would be accessed via a sewer utility ROW spur from the Hammond Trail west of U.S. 101 and Thiel Avenue on the east of U.S. 101. Temporary access routes would be improved on both the west and east side of U.S. 101 for the Southern Crossing Site. Construction would result in vehicle trips by construction workers and haul-truck trips for material deliveries. Construction-related traffic would be temporary, vary on a daily basis, and be distributed over the course of a workday and work week. A temporary controlled one-way traffic of Thiel Avenue to vehicular traffic would be required for construction and the District would follow applicable requirements for temporary roadway closures including signage and public noticing. Access for pedestrians and bicyclists along Hammond Trail north of Hiller Road would be temporarily closed for up to four weeks. North and south access for Hammond Trail users would still be provided by a detour through Hiller Loop Trail identified through signage. Thus, temporary construction impact on the circulation system would be less than significant.

Once completed, the proposed Project would not increase vehicle traffic on local streets and trails, increase the area's population, or redirect traffic patterns, and access would be the same as the current use. As the operational Project is not extending or altering a roadway network or trail, the Project would not conflict with any applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Therefore, no impact would result during operation of the Project.

b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? (No Impact)

Pursuant to SB 743 and the current CEQA Guidelines, evaluation of a project's potential transportation impact requires consideration of 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 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.

The proposed Project includes a minor VMT demand related to construction only and would not result in any operational VMT change.

The OPR Technical Advisory provides various screening criteria related to VMT that quickly identify when a project should be expected to cause a less than significant impact without conducting a detailed VMT study. According to the OPR Technical Advisory, projects that generate fewer than 110 trips per day can be assumed to cause a less than significant transportation impact (OPR 2019). The Project would not create new buildings, new employees, increase the length of roadway, add new roadways, or increase the number of travel lanes. Construction would not generate more than 110 trips per day, and operational maintenance would occur under the District's typical maintenance schedule and is not anticipated to generate additional trips more than currently occurs. Therefore, no impact would occur.

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 does not propose an alteration in the geometric design of a street or road. Project elements include wastewater lines that would be located below ground, and existing conditions along the roadway network would be restored to pre-Project conditions and would therefore not substantially increase potential hazards due to geometric design. There are no changes to land use associated with this Project. No impact would occur.

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

Emergency access to the Project Area already exists and would continue to exist under the proposed Project during both construction and operation. During construction, Thiel Avenue would be subject to controlled one-way traffic during construction of the Middle Crossing Site, but ingress and egress would be given to maintain emergency access. A steel plate would be available to cover the HAB pit in the event of a significant emergency and during non-construction hours. This would result in a less than significant impact to emergency access.

Following construction, the Project would return to pre-Project conditions. No operational impact on emergency access would result.

4.18 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, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or		✓		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.		✓		

a, i, ii) Cause a substantial adverse change in the significance of a tribal cultural resource listed, or eligible for listing, in a historical registry or identified by the lead agency? (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 initially sent to the Wiyot Tribe, Bear River Band of the Rohnerville Rancheria, Blue Lake Rancheria, and Cher-ae Heights Indian Community of the Trinidad Rancheria on September 30, 2020; however, a CEQA document was not prepared at that time. Additional letters were sent on September 25, 2025, and physically mailed on October 1, 2025, to refresh consultation. The AB 52 process gives tribes 30 days of receipt of the formal notification to initiate consultation, which would end on October 25, 2025. At the time this document was prepared, no additional responses were received from any tribe.

During the 2020 consultation, the THPO for the Blue Lake Rancheria replied on Tuesday October 20, 2020, regarding the sensitivity of the area and known cultural resources. A site visit occurred with representatives for the Bear River Band of the Rohnerville Rancheria, the Blue Lake Rancheria, the Wiyot Tribe, DZC, GHD, and the District on December 01, 2020 to discuss the Project and its potential effects to the cultural resources within the Southern Crossing Site.

Due to the presence of multiple cultural resources, representatives for the Bear River Band of the Rohnerville Rancheria, the Blue Lake Rancheria, and the Wiyot Tribe made recommendations to the District for an additional study, in addition to having a cultural monitor of ground disturbance within the Southern Crossing Site. This request was followed by the development of the Extended Phase 1. All resulting recommendations from both cultural resource investigations have been incorporated into the Project via Mitigation Measures CR-1 through CR-5. With the adoption of these mitigation measures, the potential impact to tribal cultural resources would be less than significant.

4.19 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?			✓	

The District operates a wastewater management facility (WWMF) situated adjacent to the Middle Crossing Site. This facility treats residential and commercial wastewater from the District, serving approximately 4,900 active connections. The Project would not modify the existing WWMF but would allow the three sewer lines to handle slightly larger storm event flows than the existing pipes.

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? (No Impact)

As described in Section 2, the Project is a utilities project involving the retrofitting of three existing wastewater lines to increase earthquake resiliency and the ability to handle stormwater flows; it does not constitute a new or expanded utility. The proposed Project also does not involve the use or construction of any facilities that would require new water, electrical, natural gas, or telecommunications utilities. Therefore, the Project would not require or result in the construction of other water, wastewater treatment, natural gas, or telecommunications facilities or expansion of existing facilities and no impact would result.

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? (No Impact)

The Project would not lead to an increase in demand for wastewater treatment or disposal services provided by the District because the Project does not propose residences or other structures that would require additional wastewater services. No impact would occur.

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 Impact)

The solid waste providers servicing the area include Humboldt Sanitation (HS) and the Humboldt Waste Management Authority (HWMA). During the construction phase of the proposed Project, minimal solid waste would be generated, such as removal of portions of existing wastewater pipe to be replaced. However, once operational, the Project would not generate solid waste. Potential excess soils and construction materials would be stored in designated staging areas and would be reused on-site for backfill and finishing grading purposes. After completion of the Project, excess materials would not be stockpiled on-site. Instead, the contractor would transport potential excess materials off-site for beneficial reuse, recycling, or lawful disposal.

Solid waste collected as part of the Project would be disposed of through the services provided by HS or HWMA. The Project's solid waste generation would not exceed state or local standards, nor would it overwhelm the capacity of local infrastructure. Furthermore, the Project would not impede the achievement of solid waste reduction objectives. Its primary focus remains on expanding infrastructure to utilize treated wastewater for irrigation purposes. Therefore, a less than significant impact would result.

4.20 Wildfire

	Potentially Significant Impact	Less than Significant w/ Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
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. The Project Area is located within a Local Responsibility Area (LRA) where Arcata Fire Protection District is the primary emergency response agency responsible for fire suppression and prevention (Humboldt County 2025a). The majority of the Project Area is mapped with a Moderate Fire Hazard Severity Zone (FHSZ). The closest fire station to the Project Area is the Arcata/McKinleyville Station located approximately 1.4 miles north of the Southern Crossing Site, 1.0 mile east of the Middle Crossing Site, and 1.5 miles southeast of the Northern Crossing Site.

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

A review of the Humboldt County EOP (Humboldt County 2015) indicates that the Project construction would not impair emergency response activities nor established evacuation routes because there are no established routes in the EOP. Project construction would also not impair any informal access route that may be needed in the event of an emergency. Project operation would not impair implementation or physically interfere with an established emergency response or evacuation plan because roadways would not be blocked; see Section 4.9 (f) – Hazards and Hazardous Materials for discussion of the Project's effect on emergency response and evacuation plans. 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 generally flat and where windy conditions are common. Fire ignition risk associated with construction activities is low because vegetation would be mowed prior to construction activities and would be limited to accidental ignition associated with a potential heavy machinery-related incident. 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)

The construction of the Project would not pose risk above and beyond existing risk to individuals or structures. The Project Area consists of generally flat terrain with the greatest topographical relief in the Southern Crossing Site. While vegetation is present, the immediate Project Area is not forested. Moreover, the risk of fire ignition associated with construction activities is minimal because much of the vegetation within the Project Area would be mowed prior to construction. Fire risk is also abated by moist conditions from morning fog. As the Project Area is generally flat, no residences or structures exist downslope. Due to the minimal fire risk, and absence of residence of structures downslope of the Project Area, this potential impact is considered less than significant. Project operation would contain the same wildfire risk as is present under existing conditions, and therefore no impact would occur from Project operation.

4.21 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, Hydrology and Water Quality, 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 Impact)

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 Section 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Table 4.21-1 provides a list of past, present, and reasonably foreseeable future projects within and near the Project Area (within 0.5 mile), 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, and the District, as well as review of Caltrans projects.

Table 4.21-1 Cumulative Projects Summary

Agency	Project	Summary	Construction Year
District	Wastewater Recycling Expansion Project	Expansion of the District's existing water recycling facilities to increase capacity, reduce operational costs, and offset groundwater extraction.	2027-28 Pending grant funding
County Planning and Building Department	APN 511-031-018 Subdivision	Four lot subdivision of 1.09-acre parcel.	2025-26

The Wastewater Recycling Expansion Project is located directly adjacent to the western portion of the Southern Crossing Site. This project is a District project and would not occur simultaneously to the Project. The APN 511-031-018 Subdivision is located approximately 0.23 miles north of the eastern portion of the Northern Crossing Site on the crossroad of Myers Road and Halfway Avenue. 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. Because the proposed Project would not result in significant impacts after mitigation, 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 Impact)

The Project has been planned and designed to avoid significant environmental impacts. As discussed in the analysis throughout Section 4 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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Appendix A

Air Quality Modeling Results

Appendix B

Biological Resources Report

Appendix C

Wetland Delineation Report

Appendix D

Project Mitigation and Monitoring Plan (MMRP)

