



**Mendocino Council of Governments
Covelo State Route 162 Corridor Multi-Purpose Trail**

Initial Study & Proposed Mitigated Negative Declaration

October 2017

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Initial Study & Proposed Mitigated Negative Declaration

Mendocino Council of Governments Covelo State Route 162 Corridor Multi-Purpose Trail

Prepared for:



Mendocino Council of Governments
367 N. State St., Suite 206
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Prepared by:



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October 2017

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Acronyms and Abbreviations

ADA	Americans with Disabilities Act
AG	Agriculture
APN	Assessor Parcel Number
ARB	Air Resources Board
BAAQMD	Bay Area Air Quality Management District
BMPs	Best Management Practices
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
Cal-OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CBC	California Building Code
CCR	California Code of Regulations
CDOC	California Department of Conservation
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH ₄	Methane
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CPR	California Public Resources Code
CSD	Community Services District
dB	decibel
dBA	A-Weighted Sound Level
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FRA	Federal Responsibility Area
FTA	Federal Transit Authority
GHGs	Greenhouse Gases
GIS	Geographic Information System
IS/MND	Initial Study and Mitigated Negative Declaration
Ldn	Day-night Average Sound Level
Lmax	Maximum Instantaneous Noise Level
LRA	Local Responsibility Area
MCAQMD	Mendocino County Air Quality Management District
MCOG	Mendocino Council of Governments
MLD	Most Likely Descendant
MT CO ₂ e	Metric tons carbon dioxide equivalent
N ₂ O	Nitrous oxide

NAHC	Native American Heritage Commission
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWIC	Northwest Information Center
OHWM	Ordinary High Water Mark
PF	Public Facilities
PM ₁₀	Particulate matter less than 10 micrometers in diameter
PM _{2.5}	Particulate matter less than 2.5 micrometers in diameter
PPV	peak particle velocity
PRC	Public Resources Code
PSB	Project Study Boundary
ROW	Right-of-way
RWQCB	Regional Water Quality Control Board
SR	State Route
SMP	Sensitive Species Mitigation Plan
SWPPP	Stormwater Pollution Prevention Plan
UR	Upland Residential
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1. Project Information

Project Title	Covelo State Route 162 Corridor Multi-Purpose Trail
Lead Agency Name & Address	Mendocino Council of Governments 367 N. State St., Suite 206 Ukiah, California 95482
Contact Person	Phillip J. Dow, Executive Director Telephone: (707) 463-1859
Project Location	Covelo, California (see Section 1.3 of this ISMND)
Project Sponsors	Mendocino Council of Governments 367 N. State St., Suite 206 Ukiah, California 95482 California Department of Transportation District 1 1656 Union Street Eureka, CA 95501 Round Valley Indian Tribes 77826 Covelo Road Covelo, CA 95428
General Plan Land Use Designation	Remote Residential (20 ac. minimum), Public Lands, Agriculture (40 ac. minimum), Rural Residential (10 ac. minimum), Commercial
Zoning	Multiple-Family Residential (R-3), Public Facilities (PF), Agriculture (AG), Upland Residential (UR), Commercial (C1)
Project Description Summary	Construction and operation of the Covelo SR 162 Corridor Multi-Purpose Trail.
Surrounding Land Uses and Setting Summary	The project is located within and north of the community of Covelo, along the SR 162 Corridor. Alternative 1 would run parallel to and on the west side of SR 162 from Howard Street to Hurt Road (1.5 miles) with an east-west component connecting to Henderson Lane (0.5 miles). Alternative 2 would run parallel to and on the east side of SR 162 between Biggar Lane and the Hidden Oaks Casino entrance, with the remaining portion of the trail on the west side of SR 162 identical to Alternative 1. Land uses in the project vicinity consist of service and commercial uses, rural residential, tribal, grasslands, parkland, public service and commercial uses north of Covelo. Mill Creek flows through the project alignment just south of Hurt Road. The topography is relatively flat with an approximate elevation of 1,400 feet above sea level.

1.1 Introduction

The Mendocino Council of Governments (MCOG) Covelo State Route 162 Corridor Multi-Purpose Trail Project (project) is subject to the requirements of the California Environmental Quality Act (CEQA). The MCOG is the CEQA Lead Agency. MCOG is a Joint Powers Agency comprised of the County of Mendocino, and the cities of Fort Bragg, Point Arena, Ukiah, and Willits and is the designated Regional Transportation Planning Agency. 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;
- To disclose potential project environmental impacts; and
- To inform the CEQA Lead Agency, responsible agencies, trustee agencies, and the public regarding the potential environmental impacts of the project.

This Initial Study has been prepared to satisfy the requirements of CEQA (Public Resources Code (PRC), Div. 13, Sec 21000-21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

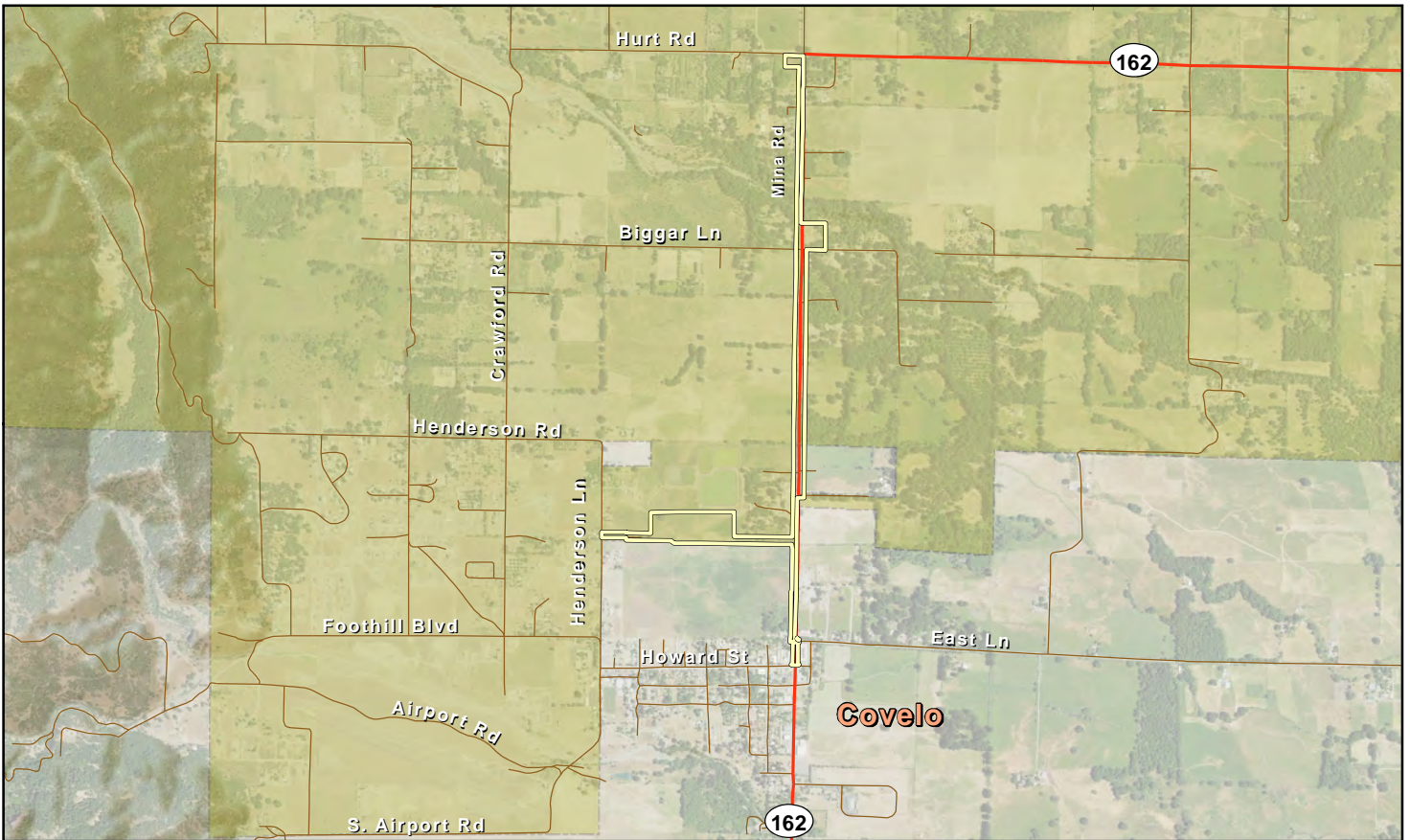
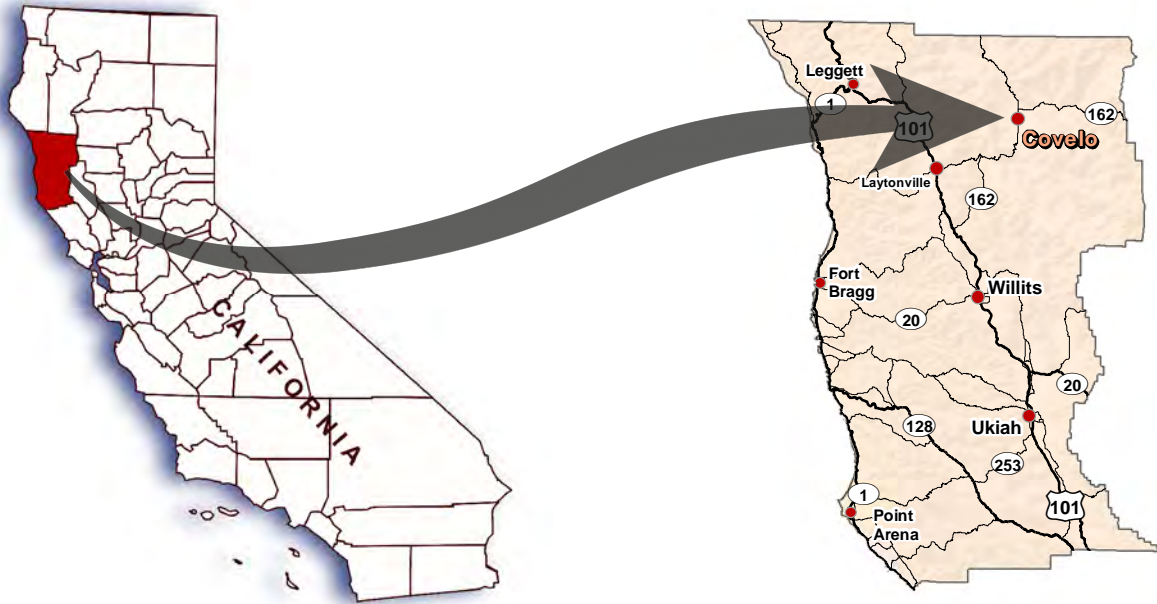
1.2 Project Background and Need

MCOG in partnership with the California Department of Transportation (Caltrans) and the Round Valley Indian Tribe have received grant funding for the design and construction of the Covelo SR 162 Corridor Multi-Purpose Trail. Non-motorized travel is an important form of transportation in Round Valley. Covelo and the Round Valley Indian Reservation are not served by public transportation. Children, elderly and low-income residents use non-motorized travel modes. The need for safe pedestrian corridors was identified by local residents as a high priority in the Covelo/Round Valley Non-Motorized Needs Assessment and Engineered Feasibility Study (2014) and in Making Safe & Healthy Community Connections in Round Valley – Walk/Bike Path and Community Revitalization Strategy (2010).

The purpose of this project is to reduce the potential for conflicts between bicyclists, pedestrians, and vehicles within a portion of the SR 162 Corridor and increase mobility options in the community. SR 162 serves as “Main Street” within the community of Covelo. The highway has no developed facilities for bicycles or pedestrians and the drainage ditches on both sides of the highway force non-motorized users to travel in the vehicle lanes. The project would link critical activity centers within the community, including schools, the downtown center, tribal facilities, and residential areas.

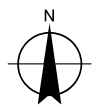
1.3 Project Location

The project is located within Mendocino County in Round Valley in the community of Covelo, along the SR 162 Corridor. Mendocino County Assessor Parcel Numbers (APN) along the project alignment and staging areas include the following: 032-470-07, 032-470-20, 032-470-35, 032-470-36, 032-470-10, 032-390-36, 032-480-15, 032-480-51, 032-400-53, 032-400-52, 032-400-07, 032-400-08, 032-400-19, 032-400-20, 033-013-02, 034-190-01, 034-190-03, 033-013-12, 033-230-23, 033-230-22, 033-230-09, 034-280-12, 033-230-11, and 033-270-01. Figure 2 shows the project study boundary (PSB) incorporating the finished trail as well as temporary construction staging areas.



-  Project Study Boundary
-  State Route 162
-  Round Valley Reservation
-  Local Roads

Paper Size 8.5" x 11" (ANSI A)
 0 0.1 0.2 0.3 0.4 0.5
 Miles



Mendocino Council of Governments
 Covelo SR 162 Corridor Multi Purpose
 Trail Project



Job Number 11110706
 Revision B
 Date 16 Aug 2017

Vicinity Map

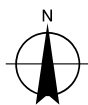
Figure 1

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-  Project Study Boundary
-  Staging Area

Paper Size ANSI A
 0 250 500 750 1,000
 Feet
 Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



Mendocino Council of Governments
 Covelo SR 162 Corridor Multi Purpose
 Trail Project
**Project Study Boundary
 and Staging Areas**

Job Number | 8410146
 Revision | C
 Date | 16 Aug 2017

Figure 2

© 2017. Whilst every care has been taken to prepare this map, GHD make no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and cannot accept liability and responsibility of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred by any party as a result of the map being inaccurate, incomplete or unsuitable in any way and for any reason.
 Data source: USDA NAIP Orthoimagery, 2010; GHD data, 2013/2017. Created by:ashows

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1.4 Project Description

This project would consist of the construction and operation of a Class I multi-purpose trail along the SR 162 corridor from Howard Street in the community of Covelo, north to Hurt Road. The proposed project includes two alternative alignments. The Alternative 1 alignment would run along the west side of SR 162 for the entire length of the trail. The Alternative 2 alignment would run primarily on the west side of SR 162 except between Biggar Lane and the Hidden Oaks Casino entrance where the trail would be located on the east side of SR 162 (Reference Figures 1 and 2). Alternative 2 would run parallel to and on the east side of SR 162 between Biggar Lane and the Casino entrance with the remaining portion of the trail on the west side of SR 162 identical to Alternative 1. The project would reduce the potential for conflicts between bicyclists, pedestrians, and vehicles within the SR 162 Corridor and increase mobility options in the community. The following sections provide additional information for each project component.

1.4.1 Design Standards

The design standard goal is to achieve the standards of Class I multi-use trails (*Caltrans Highway Design Manual*, American Association of State Highway and Transportation Officials *Guide for the Development of Bicycle Facilities (1999)*, Federal Highway Administration *Manual of Uniform Traffic Control Devices (MUTCD) (2009)* and the Americans with Disabilities Act (ADA). The preliminary design based on these standards for all sections of the trail for both alternatives along SR 162 from Howard Street north to Hurt Road, and from SR 162 west to Henderson Lane are presented in Appendix A. Particular constraints within the trail alignments may warrant adjustments to the standards to address site specific issues. Throughout the project alignment, the following design standards would be applied as the goal for design.

Streetscape Improvements

Selected streetscape improvements are planned between the intersections of Howard Street and SR 162 (on the north side) and East Lane and SR 162 (reference Appendix A). Improvements include new sidewalk and curb extensions (bulbouts), Class II bike lanes in both directions on SR 162, and new crosswalk across East Lane. The Class I bike lane would begin on the west side of SR 162 at East Lane. Streetscape improvements will also include striping and pavement markings. In addition, streetscape improvements could include trail amenities such as benches, trash and recycling receptacles, and other features.

Trail Width and Surface

The standard trail width for this project would be between eight and 10 feet in width, constructed of asphalt, with two 2-foot gravel shoulders on each side, and in some sections there would be a 6-foot bridle shoulder on the west side with 2-foot gravel shoulder on the east side. Between SR 162 and Henderson Lane the trail would be 8-foot in width with a 6-foot gravel shoulder on the south side and a 2-foot gravel shoulder on the north side. In order to comply with Class I and ADA standards, the trail would not exceed a slope of five percent grade. The trail width would be adjusted in selected areas to accommodate physical and environmental considerations.

Structural Pavement Sections

The trail is anticipated to have a typical structural section that has approximately six inches of aggregate base and approximately three inches of asphalt. In some locations, there may be up to one-foot of aggregate base depending on subsurface conditions. In areas of poor soils, the

structural section may be increased or other soil stabilization measures such as the use of geotextiles and increased structural section depth may be employed.

Bridge Structure

A pre-manufactured concrete or steel bridge would be constructed over Mill Creek on the west side of SR 162. The bridge would be approximately 160 feet in length and 12 feet wide and would span the creek, with footings above the normal high water level of the creek. The bridge would be fabricated off site in sections which would be trucked to the project site and assembled on site. The bridge would be installed using impact driven piles, approximately three per side (14" diameter and 40' long). The bridge would be designed for pedestrian traffic and light maintenance vehicles. Removable bollards would prevent unauthorized vehicles from crossing the bridge.

In general, the uppermost five to 10 feet is medium dense granular soils (to about channel bottom) then turns to soft clay to a depth of 30-33 feet. Below this is an eight to 12 foot thick layer of medium dense granular soil before turning to soft clay again. Groundwater is near channel bottom.

Signage

Interpretive and wayfinding signage would be included along the trail at key locations to provide biological and/or cultural and historic information about the area and directions to specific locations. It is anticipated that wayfinding and circulation control signage would be included at the north and south trailheads as well as eastern intersection and the western trailhead. Such signage would typically be pole mounted reflective signs based on Caltrans standards. Informative and interpretive signage would be provided in selected areas of the trail where appropriate. Interpretive signage would typically be mounted lower either vertically or sloped to allow trail users to learn about the cultural and biological features of the area. Such interpretive signs could be made of a variety of materials and be of a variety of sizes based on the information being portrayed. It is anticipated that wayfinding and circulation control signage would be installed during the initial trail construction and that interpretive signage may be installed over time as funding and interest makes it feasible.

Striping and Vehicle Control

The trail would not include a centerline stripe. Standard trail-related traffic-control signage would be installed in order to comply with Class I standards. For example, "Stop Ahead" and "Stop" signs would be installed at locations in which the trail intersects a vehicular roadway. Other signage would be installed as required. At locations in which the trail intersects a vehicular roadway, removable bollards would be installed to prevent motorized vehicles from entering the trail. Authorized personnel (e.g. police, emergency-responders, county maintenance crews, etc.) would be able to remove the bollards and temporarily access some portions of the trail with motorized vehicles.

Drainage

The trail would typically have a two percent crown or cross slope to allow surface water to flow away from the trail surface. Some ditches would need to be modified and there would need to be a few more culverts. There are approximately five storm drain culverts that would be installed and either replace existing outdated culverts or augment existing stormwater drainage along the project alignment. The proposed locations of these culverts are shown and described in Appendix A.

Revegetation of Disturbed Areas

The construction of the project would temporarily disturb construction areas adjacent to the finished trail. Such disturbed areas are typically road shoulders and ditches and these areas would be revegetated using broadcast seeding or hydroseeding and straw mulch.

Fencing

There is existing fencing along some portions of the trail alignment (reference Appendix A). In construction locations where there is no fencing, fencing would be constructed on the west side of the trail to help delineate the edge of the trail area. In construction areas where there is existing fencing, it will be replaced in kind when impacted by the trail alignment. The type of fencing will essentially match the existing fencing and would typically be confirmed with the property owner.

1.4.2 Project Construction

Construction Schedule

Construction of the project is expected to begin in Spring 2020 and require approximately six months to complete. Anticipated daytime work hours are 7:00 a.m. to 7:00 p.m., Monday through Saturday. Construction on Sunday or legal and County holidays is not currently anticipated.

Construction Staging, Activities and Equipment

There are three staging areas proposed for this project as shown in Figure 2. The contractor could be working throughout the construction area, not just from one end to the other. The southern-most staging area is located between SR 162 and Henderson Lane north of the proposed trail alignment and south of the treatment ponds. The second staging area is located at the northwest corner of the intersection of SR 162 and Biggar Lane just north of Alternative 2's northern end. The third and northern-most staging area is located at the southwest corner of the intersection of SR 162 and Hurt Road.

Construction would primarily include clearing and grubbing, excavation, trail construction, pre-manufactured bridge installation, fencing installation, pavement marking, wayfinding, interpretive signage, amenities, bulbouts, crosswalks, and sidewalk construction at the Howard Street and SR 162 and East Lane and SR 162 intersections. All construction activities would be accompanied by both temporary and permanent erosion and sediment control best management practices.

Trail construction for both alternatives would include the following activities:

- Clearing and Grubbing - To clear vegetation and topsoil from the proposed trail footprint
- Excavation – Primarily at bridge approaches with other shallow excavations to achieve required trail grades
- Embankment – To maintain trail grades through low areas
- Aggregate Base – For trail shoulders and to support asphalt paving
- Asphaltic Concrete Paving - For trail surface
- Fencing/Gates - To replace fencing impacted by the trail alignment
- Striping and signage

Pre-manufactured Bridge Assembly and Placement would include the following activities:

- Excavation – For bridge abutment foundations
- Pile Driving - To support bridge abutments

- Bridge Abutments – Either pre-manufactured or poured-in-place concrete to support pre-manufactured bridges
- Bridge Placement – Set pre-manufactured bridge on abutments
- Miscellaneous Pre-manufactured Bridge Assembly – For bridge rail and connections

Equipment required for trail construction would include: tracked excavator, backhoe, bulldozer, dump truck, paving machine, cranes, power sweeping equipment, concrete mix trucks, and pick-up trucks. Equipment required for pre-manufactured bridge assembly and placement would include excavators, pile driver, a crane, and pavement striping equipment.

Construction access would be to and from the staging areas identified above and as shown in Figures 1 and 2. Roadways that would be utilized for construction access and staging areas include SR 162, Howard Street, East Lane, Henderson Lane, Biggar Lane and Hurt Road.

It is not anticipated that any temporary utility extensions, such as electric power or water, would be required for construction.

Construction Access and Hauling Traffic

The anticipated haul truck routes to the project area include Highway 101 to SR 162 from the south. The number of construction-related vehicles traveling to and from project area would vary on a daily basis. It is anticipated that up to 20 haul truck round trips would occur on a peak day, assuming five trucks for off haul of soil cuttings, five trucks for import of water, and five trucks for import or off-haul of other materials or equipment. In addition, it is anticipated that construction crew trips would require up to 5 round trips per day. Therefore, for the purposes of analysis, on any one day during construction, up to 20 vehicle round trips could occur.

Traffic Control

In accordance with Mendocino County requirements, the construction contractor would be required to obtain an encroachment permit from both the County and Caltrans prior to beginning the work along SR 162. As part of the encroachment permit process, the construction contractor would be required to prepare traffic control plans for review and acceptance of planned work within the public ROW. The development and implementation of traffic control plans would include, but not necessarily be limited to: traffic controls, signs, and flaggers conforming with the current California Manual of Uniform Traffic Control Devices.

Groundwater Dewatering

Dewatering is not anticipated; however, if needed, temporary groundwater dewatering would be conducted to provide a dry work area. Dewatering would involve pumping water out of a trench. Groundwater would typically be pumped to Baker tanks (or other similar type of settling tank). Following the settling process provided by a tank, the water would be used for dust control and compaction.

Site Restoration and Demobilization

Following construction, the contractor would demobilize and remove equipment, supplies, and construction wastes. The disturbed areas along the project alignment would be revegetated, including the planting of suitable trees and other vegetation, and final erosion and sediment controls would be installed. Other disturbed areas along the project alignment would be restored to general pre-construction conditions.

Wetlands Mitigation

Impacts to wetlands for the Alternative 1 alignment have been calculated as 0.64 acres (which includes 3.14 square feet impacts below the OHWM, and a combination of palustrine emergent wetland, palustrine emergent ditch, and OHW ditch). Impacts associated with Alternative 2, which includes the impacts associated with Alternative 1 where coincident, plus estimated impacts where Alternative 2 deviates from Alternative 1 based on reconnaissance mapping of approximate wetland boundary, totals 0.67 acres (combination of palustrine emergent wetland and palustrine emergent ditch). Mitigation would consist of clearing/grubbing, excavation, contouring and planting.

1.4.3 Maintenance and Operation

The trail would be used for non-motorized transportation and recreation, including but not limited to walking, bicycling, running, dog-walking, skateboarding, roller skating and equestrians. Dogs would only be allowed on leash per Mendocino County Municipal Code Section 10.08.010.

Following construction, general operation and maintenance activities associated with the proposed trail would presumably remain the responsibility of the Tribe and Caltrans, or others through a maintenance agreement with Caltrans. The trail would require periodic inspections, trash and debris pickup, vegetation management, power sweeping, slurry sealing and pavement patching/repaving, repainting, sign and interpretive element maintenance, general repairs, and overall management as needed. Operation and maintenance of the project would generate less than one traffic trip per week on average.

Motorized access would be limited to light maintenance and emergency service vehicles. Access would be gained at trail/roadway crossings equipped with secured, but removable, bollards to prevent unintended vehicular access.

1.5 Environmental Protection Actions Incorporated into the Project

The following actions are included as part of the project to reduce or avoid potential adverse effects that could result from construction or operation of the project. Mitigation measures are presented in the following analysis sections in Chapter 3. Environmental Protection Actions and mitigation measures are included in the Mitigation, Monitoring, and Reporting Program prepared for the project (bound separately).

1.5.1 Environmental Protection Action 1 – Geotechnical Design

As part of the project design process, MCOG has engaged a California-registered Geotechnical Engineer to conduct a geotechnical report for the project. MCOG's contractor(s) will design the project to comply with the site-specific recommendations made in the project's geotechnical report. This will include design in accordance with the seismic and foundation design criteria, as well as site preparation and grading recommendations included in the report. The geotechnical recommendations will be incorporated into the final plans and specifications for the project, and will be implemented during construction.

1.5.2 Environmental Protection Action 2 – Implement Air Quality Emission Control Measures During Construction

The Mendocino County Air Quality Management District (MCAQMD) has adopted thresholds of significance for CEQA that recommends implementation of Best Management Practices to limit construction-related fugitive dust emissions. To limit dust, criteria pollutants, and precursor

emissions associated with construction activities, MCOG will include the following MCAQMD and Bay Area Air Quality Management District (BAAQMD) construction measures in all construction contract specifications for the project:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered twice per day, and additionally as necessary during dry or windy conditions.
2. Erosion control measures must be employed to prevent water runoff containing silt and debris from entering the storm drain system.
3. All haul trucks transporting soil, sand, or other loose material on- or off-site shall be covered.
4. All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day.
5. Approved chemical soil stabilizers shall be applied to exposed earth surfaces in inactive construction areas and exposed stock piles (i.e. sand, gravel, dirt).
6. All vehicle speeds on unpaved areas shall be limited to 10 miles per hour.
7. Dust generating activities shall be limited during periods of high winds (over 15 mph).
8. Access of unauthorized vehicles onto the construction site during non-working hours shall be prevented.
9. A daily log shall be kept of fugitive dust control activities.
10. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage identifying these idling limitations shall be provided for construction workers at all access points.
11. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
12. A publicly visible sign shall be posted with the telephone number and person to contact at the MCOG regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

1.5.3 Environmental Protection Action 3 - Construction Measures for Avoiding Special-status Wildlife Species Habitat

To protect special-status wildlife species and habitats located in the vicinity of the project, MCOG will implement the following protection actions during construction of the project:

1. No work activities will occur within the channel of Mill Creek below the area mapped as Ordinary High Water Mark (OHWM), although some work including pile driving may be within the riparian zone. Consultation with the California Department of Fish and Wildlife (CDFW) and the National Marine Fisheries Service will occur regarding potential impacts to aquatic habitat and special-status fish species (and potentially amphibian species depending on listing status at time of implementation), and the U.S. Army Corps of Engineers regarding impacts/fill of wetlands.

2. Silt fencing and orange construction avoidance fence will be installed along the entire downslope edge of the disturbed area of project sites on the east and west side of Mill Creek as necessary.
3. Work immediately adjacent to Mill Creek would avoid impacts to fish and frogs by taking place only when the stream channel is dry (normally early August through late October) for a sufficient distance up and downstream to avoid the risk of piledriving impacts. To avoid sediment delivery to a creek where salmonids could be present, work immediately adjacent to the creek would terminate by October 15 if feasible (or at onset of rainy season).

1.6 Required Permits and/or Approvals

Approvals required for the project include project approval by the MCOG Board of Directors. Several additional agencies would also be involved in the consideration of portions of the project. Federal, State and local approvals that may be required for the project include the following:

- County of Mendocino: Encroachment Permit and Grading Permit
- Caltrans: Encroachment Permit
- U.S. Army Corps of Engineers: Jurisdictional Determination and Section 404 Individual Permit
- U.S. Fish and Wildlife Service/National Marine Fisheries Service: Section 7 Consultation (potential)
- If Section 7 is triggered due to a federal nexus than Section 106 would also be triggered and the federal lead may be required to consult with SHPO/THPO
- North Coast Regional Water Quality Control Board: Section 401 Water Quality Certification
- California Department of Fish and Wildlife: Section 1602 Notification of Lake or Streambed Alteration (potential); Section 2081 Incidental Take Permit (potential). Incidental Take Statement (ITP) from CDFW potentially required for relocating Foothill Yellow-legged Frog, Coho or other state listed or candidate species.

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2. Environmental Factors Potentially Affected


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

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Agricultural & Forestry Resources | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Land Use/Planning | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Population/Housing | |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services | |

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



 MCOG Signature

10/16/17

 Date

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3. Environmental Analysis

3.1 Aesthetics

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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) Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✓	

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

A scenic vista is generally considered a view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. No specific scenic vistas within the project area are identified in the County of Mendocino General Plan, although goals and policies are included to protect the scenic values of the county’s natural and rural landscapes, scenic resources, and areas of significant natural beauty. All proposed project components would be located on relatively flat land and would typically be at ground level (e.g., the Class I trail itself) or less than six feet in height (e.g., fencing and signage and bridge). Therefore, the project (during construction and operation) would not impact views of forested areas or scenic vistas after construction, and construction activities would be temporary and only visual in the immediate vicinity. Therefore, the impact would be less than significant.

b) Substantially damage scenic resources within a state scenic highway? (No Impact)

Based on California Scenic Highway Mapping System information no designated state scenic highways are found adjacent to or within view of the project alignment (Caltrans 2011). There are no officially designated State Scenic Highways within Mendocino County, and only State Routes 1 and 20 have been identified by the State Scenic Highway Mapping System as eligible for state listing. Therefore, no impact to scenic resources within a state scenic highway would occur with regard to the project’s construction or operation.

c) Have an adverse effect on visual character or quality? (Less than Significant)

The project is expected to improve the scenic quality/character of the area by installation of a Class I multi-purpose trail, interpretive signage and native landscaping. The attraction of multiple trail user

groups may have the added benefit of deterring littering and other potentially damaging activities along SR 162 between Covelo and Hurt Road.

Temporary adverse visual impacts may occur from construction activities associated with the project; however, the land under both project alternatives is primarily undeveloped except for the Round Valley Indian Reservation facilities and developed land at the intersections of Howard Street and SR 162 and East Lane and SR 162. This impact would be short-term (approximately six months of construction) and less than significant. In the long-term the existing visual character along the project alignment would improve for the reasons mentioned above.

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

No nighttime construction is planned so there would be no lighting associated with construction. No impact would occur. The project does not include trail lighting so there would be no lighting impacts post-construction. Potential impacts from glare would primarily be limited to construction equipment and vehicle windows and is anticipated to be less than significant.

3.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less-than-Significant with 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?			✓	

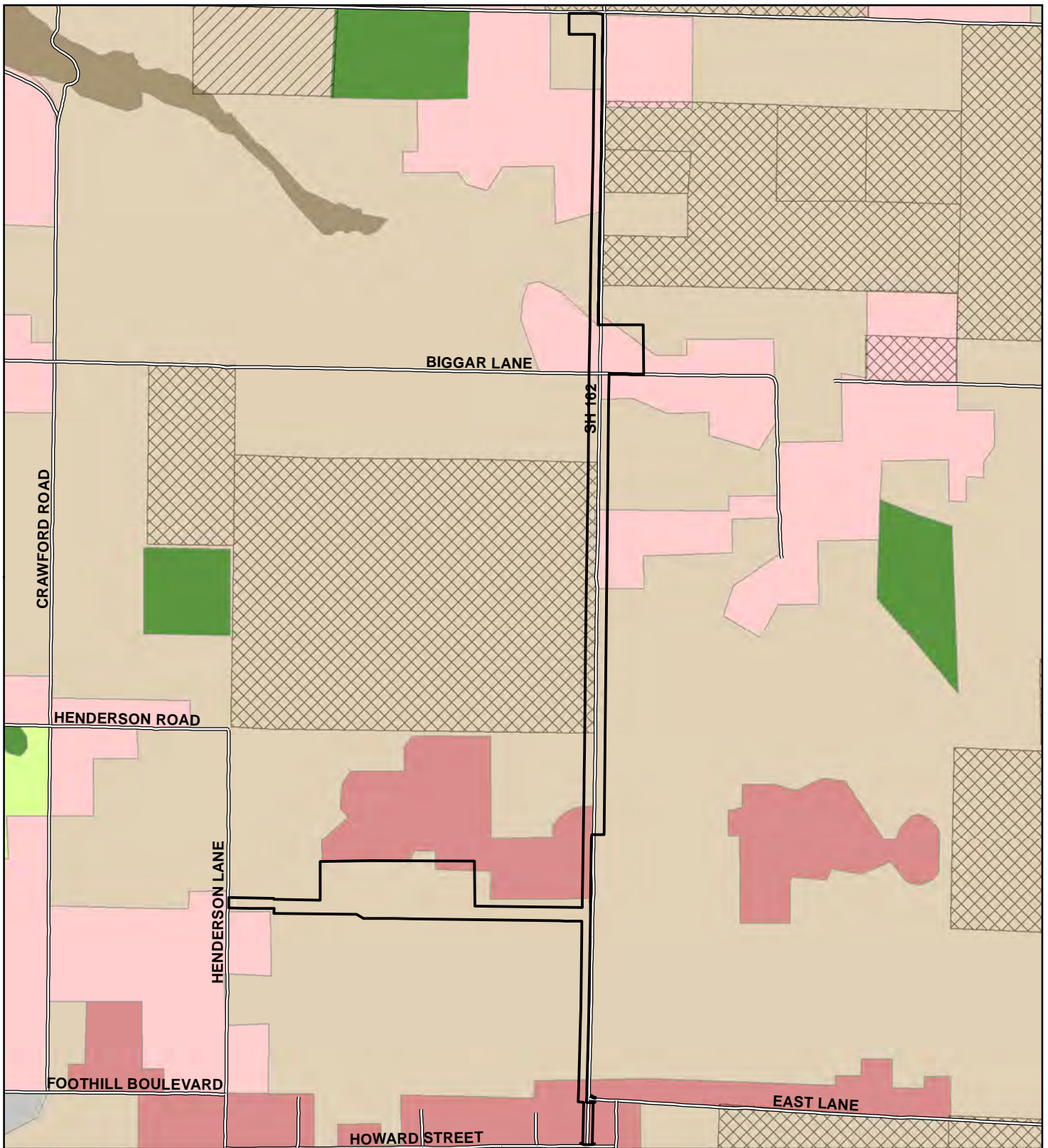
a, c, d) Convert farmland or forest land or conflict with existing zoning for agricultural use? (No Impact)

Neither project alignment alternative is located on any Important Farmlands as mapped by the Farmland Mapping and Monitoring Program of the California Department of Conservation (CDOC 2016). There is no land along the project alignment alternatives zoned for forest land or timberland, no forest land or timber harvesting in the project vicinity, nor are there lands suitable for timber harvesting; therefore, the project would not encroach upon or affect timber harvesting, or convert any Important Farmlands. No impact to Important Farmland or forest resources would occur.

b, e) Conflict with existing zoning for agricultural use, or a Williamson Act contract, or result in conversion of farmland to non-agricultural use? (Less than Significant)

There are lands zoned for agricultural use along Alternative 1, lands in agricultural use, and one parcel under Williamson Act contract (CDOC 2011) on the west side of SR 162 (reference Figure 3.2-1); however, the proposed project would not change the agricultural zoning or remove agricultural lands from agricultural use or remove APN 033-013-012 from Williamson Act contract.

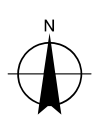
Zoning and Williamson Act contracted lands would be unchanged with the project. The proposed trail is an acceptable use under the Williamson Act; therefore, no requirement from the county for contract modifications would be required (T. Matican, personal communication, August 15, 2017). There are also a number of parcels on the east side of SR 162 which are under Williamson Act contract; however, the eastern project alignment alternative would not go through any of those properties. The impact is therefore less than significant.



Farmland Mapping and Monitoring Program Classifications

- | | | | | |
|------------------------|--|--|--|-------------------------|
| Project Study Boundary | Williamson Act - Prime Agricultural Land | Grazing Land | Prime Farmland | Unique Farmland |
| Roads | Williamson Act - Non-Prime Agricultural Land | Nonagricultural and Natural Vegetation | Rural Residential and Rural Commercial | Urban and Built-Up Land |
| | | | Vacant or Disturbed Land | |

Paper Size ANSI A
 0 500 1,000
 Feet
 Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



Mendocino Council of Governments
 Covelo SR 162 Corridor Multi Purpose
 Trail Project
**Agricultural Zoning and
 Williamson Act Parcels**

Job Number | 11110706
 Revision | B
 Date | 16 Aug 2017

Figure 3.2-1

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3.3 Air Quality

	Potentially Significant Impact	Less-Than-Significant Mitigation Incorporation	With	Less-Than-Significant Impact	No Impact
Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?				✓	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				✓	
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				✓	
d) Expose sensitive receptors to substantial pollutant concentrations?				✓	
e) Create objectionable odors affecting a substantial number of people?				✓	

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

This impact relates to consistency with an adopted attainment plan. The Mendocino County Air Quality Management District (MCAQMD) is responsible for monitoring and enforcing local, state, and federal air quality standards. The U.S Environmental Protection Agency (EPA) sets the National Ambient Air Quality Standards for the following six ‘criteria’ air pollutants: ozone, particulate matter (PM₁₀ and PM_{2.5}), nitrogen dioxide, carbon monoxide, lead, and sulfur dioxide. The California Air Resources Board (ARB) administers the California Ambient Air Quality Standards, which include the six criteria pollutants listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride.

Mendocino County is designated ‘attainment’ for all National Ambient Air Quality Standards. With regard to the California Ambient Air Quality Standards, Mendocino County is designated attainment for all pollutants except PM₁₀. Mendocino County is designated as “non-attainment” for the state’s PM₁₀ standard. To address non-attainment for PM₁₀, the MCAQMD adopted a Particulate Matter Attainment Plan in 2005. This plan presents available information about the nature and causes of

PM₁₀ standard exceedances and identifies cost-effective control measures to reduce PM₁₀ emissions to levels necessary to meet California Ambient Air Quality Standards.

PM₁₀ refers to inhalable particulate matter with an aerodynamic diameter of less than 10 microns. PM₁₀ 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. PM₁₀ emissions include smoke from wood stoves, construction dust, paved and unpaved road dust, and wildfires. Therefore, any use or activity that generates airborne particulate matter may be of concern to the MCAQMD. The proposed project would create PM₁₀ emissions in part through vehicles coming and going to the project site during construction and the on-site construction activity associated with the project.

MCAQMD Regulation 1, Air Pollution Control Rules, has the following three rules relating to the control of fugitive dust:

Rule 1-400(a). Prohibits activities that "cause injury, detriment, nuisance or annoyance to a considerable number of persons...or which endanger the...health or safety of...the public..."

Rule 1-430(a). Prohibits activities which "...may allow unnecessary amounts of particulate matter to become airborne..."

Rule 1-430(b). Requires that "...reasonable precautions shall be taken to prevent particulate matter from becoming airborne..."

Pursuant to the rules listed above, the handling, transporting, or open storage of materials in such a manner, which allows or may allow unnecessary amounts of particulate matter to become airborne, shall not be permitted. Reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including, but not limited to: (1) covering open bodied trucks when used for transporting materials likely to give rise to airborne dust; and (2) the use of water during the grading of roads or the clearing of land. The project's Environmental Protection Action 2 enhances project compliance with the above-listed rules. Further, Environmental Protection Action 2 incorporates additional fugitive dust emission and construction equipment emission controls recommended by the Bay Area Air Quality Management District (BAAQMD). Therefore, the project complies with applicable rules, and would not conflict with or obstruct implementation of the applicable air quality plan with regard to construction and operation.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Less than Significant)

This impact is related to localized criteria pollutant impacts. Potential localized impacts would be exceedances of State or federal standards for PM₁₀. Localized PM₁₀ is of concern during construction because of the potential to emit fugitive dust during earth-disturbing activities.

Both alternatives would include clearing and grubbing activities, earthwork and grading, asphaltic paving, and striping and signage. Generally, the most substantial air pollutant emissions would be dust generated from site grading and earthwork. If uncontrolled, these emissions could lead to both health and nuisance impacts. Construction activities would also temporarily create emissions of equipment exhaust and other air contaminants. The project's potential impacts from equipment exhaust are assessed separately in Section 3.3 c), below.

The MCAQMD does not have formally adopted thresholds of significance for fugitive, dust-related particulate matter emissions. However, the MCAQMD recommends using the adopted BAAQMD CEQA thresholds for projects in Mendocino County. The BAAQMD's approach to determining

significance for fugitive dust emissions from project construction. The BAAQMD bases the determination of significance for fugitive dust on a consideration of the control measures to be implemented. If all appropriate emissions control measures recommended by BAAQMD are implemented for a project, then fugitive dust emissions during construction are not considered significant. BAAQMD recommends a specific set of “Basic Construction Measures” to reduce emissions of construction-generated PM₁₀ to less than significant. Without incorporation of these Basic Construction Measures, the project’s construction-generated fugitive PM₁₀ (dust) would result in a potentially significant impact. Environmental Protection Action 2 incorporates the Basic Construction Measure controls recommended by the BAAQMD. Environmental Protection Action 2 also enhances compliance with MCAQMD Rule 1-400(a), Rule 1-430(a), and Rule 1-430(b). Therefore, the project would result in a less than significant impact for construction-period PM₁₀ generation, and would not violate or substantially contribute to an existing or projected air quality violation.

Following construction, the project would not include any stationary sources of air emissions. The trail would be used for non-motorized transportation and recreation. General maintenance activities associated with the proposed trail would remain the responsibility of the Tribe and Caltrans (or Caltrans sub-contractor), and include annual inspections, repaving, restriping, and repairs as needed. Operation and maintenance of the project would generate less than one traffic trip per day on average. The project would not increase the population or bring new, permanent employees to the project area. As such, the project would not result in substantial long-term operational emissions of criteria air pollutants. Therefore, project-generated operational emissions would not violate or contribute substantially to an existing or projected air quality violation. The project’s impact would be less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment? (Less than Significant)

This impact is related to regional criteria pollutant impacts. As identified in Section 3.3 a), Mendocino County is designated nonattainment of the State’s PM₁₀ standard. The county is designated attainment for all other state and federal standards.

For construction emissions, MCAQMD recommends using the adopted BAAQMD CEQA thresholds for projects in Mendocino County. In addition, the MCAQMD recommends that for construction projects that are less than one year in duration, Lead Agencies should annualize impacts over the scope of actual days that peak impacts are to occur, rather than the full year. The project’s construction is anticipated to require approximately six months to complete. Emissions modeling was conducted for project construction, as detailed below.

The California Emissions Estimator Model (CalEEMod) version 2016.3.1 was used to estimate air pollutant emissions from project construction (Appendix A). Project construction is anticipated to begin in spring 2020 with construction complete within approximately six months. Construction equipment activity was estimated based on 2.5 acres of asphaltic pavement, and a 28.98 total acres of disturbance. Construction activity and duration is expected to be substantially similar for both alternatives. Therefore, the emissions output is representative of each alternative.

MCAQMD recommends reasonable precautions to prevent particulate matter from becoming airborne. Environmental Protection Action 2 includes enhanced compliance with MCAQMD Rule 1-400(a), Rule 1-430(a), and Rule 1-430(b), and with the Basic Construction Measure controls recommended by the BAAQMD.

These measures are accounted for in CalEEMod as “mitigation” because the model categorizes the measures as “mitigation,” even though they are technically not mitigation. The emissions modeling included watering the construction site three times per day, promptly replacing ground cover on disturbed areas, and cleaning trackout off of paved roadways.

Table 3.3-1 summarizes construction-related emissions (without mitigation or environmental protection actions). As shown in Table 3.3-1, the project’s construction emissions would not exceed the MCAQMD’s recommended thresholds of significance. Therefore, the project’s construction emissions are considered to have a less than significant impact.

Table 3.3-1 Construction Regional Pollutant Emissions

Parameter	Emissions (tons per year)			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Total Tons	0.21	1.84	0.08	0.08
Total lbs	422.40	3,687.80	168.60	155.20
Average Daily Construction Exhaust Emissions	4.22	36.88	1.69	1.55
Threshold of Significance	54	54	82	54
<i>Significant Impact?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Following construction, the project would not include any stationary sources of air emissions. The trail would be used for non-motorized transportation and recreation. General maintenance activities associated with the proposed trail would remain the responsibility of the Tribe and Caltrans (or Caltrans sub-contractor), and include annual inspections, repaving, restriping, and repairs as needed. Operation and maintenance of the project would generate less than one traffic trip per day on average. The project would not increase the population or bring new, permanent employees to the project area. As such, the project would not result in substantial long-term operational emissions of criteria air pollutants. Therefore, project-generated operational emissions would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment. The project’s impact would be less than significant.

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

Activities occurring near sensitive receptors should receive a higher level of preventative planning. Sensitive receptors include school-aged children (schools, daycare, playgrounds), the elderly (retirement community, nursing homes), the infirm (medical facilities/offices), and those who exercise outdoors regularly (public and private exercise facilities, parks). There are multiple single-family residential dwellings within 100 feet from both alternative alignments. This discussion addresses whether the project would expose sensitive receptors to substantial pollutant concentrations from project construction, and naturally occurring asbestos during earth-disturbing activities.

Construction-generated Dust and Exhaust Emissions

As described in Section 1.5, “Environmental Protection Actions Incorporated into the Project,” the project would enhance compliance with the MCAQMD’s Rule 1-400(a), Rule 1-430(a), and Rule 1-430(b), and incorporates the BAAQMD’s Basic Construction Measures. BAAQMD’s Basic

Construction Measures include minimizing idling times for trucks and equipment to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]), and ensuring that construction equipment is maintained in accordance with manufacturer's specifications.

Construction would generally be linear, and would not be expected to occur for a substantial amount of time. Due to the relatively short length of the construction period, the lack of intensive construction activities, and the implementation of fugitive dust control measures, the project would not result in the exposure of sensitive receptors to substantial pollutant concentrations. Therefore, the construction-related impact would be less than significant.

Following construction, the project would not include any stationary sources of air emissions or new mobile source emissions that would result in substantial long-term operational emissions of criteria air pollutants. Therefore, project operation would not expose nearby sensitive receptors to substantial levels of pollutants. The operation-related impact would be less than significant.

Construction-disturbed Naturally Occurring Asbestos

Construction in areas of rock formations that contain naturally occurring asbestos could release asbestos into the air and pose a health hazard. A review of the map containing areas more likely to have rock formations containing naturally occurring asbestos in Mendocino indicates that there are no areas likely containing naturally occurring asbestos in the immediate project area (MCAQMD 2005). Therefore, it can be reasonably concluded that the project would not expose sensitive receptors to naturally occurring asbestos during project construction. Impacts would be less than significant.

e) Create objectionable odors affecting a substantial number of people? (Less than Significant)

The project would not create odors that could reasonably be considered objectionable by the general public because no aspect of project construction is anticipated to create objectionable odors except for limited exhaust fumes from gas powered equipment. Following construction, implementation of the project would not result in any major sources of odor. The impact would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less-than-Significant with 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 Wildlife or US Fish and Wildlife Service?		✓		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				✓
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

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

An evaluation of the existing biological setting on and near the project alignment for both alternatives was conducted to determine the potential for special-status vegetation communities,

plants, or animal species to occur. Information on special-status plant species was compiled through a review of the literature and database searches. Database searches for known occurrences of special-status species focused on the USGS 7.5 minute quadrangles in which the project is located (Covelo East and Covelo West) and the 10 surrounding quads (Bluenose Ridge, Updegraff Ridge, Iron Peak, Laytonville, Dos Rios, Jamison Ridge, Leech Lake Mountain, Mina, Newhouse Ridge, and Thatcher Ridge). The following sources were reviewed to determine which special-status plant and wildlife species or habitats/plant communities have been documented in the project vicinity and likelihood to occur on or adjacent to the project alignment:

- *A Manual of California Vegetation Second Edition* (Sawyer et al. 2009) California Natural Diversity Database records (CNDDDB) (CDFG 2012)
- California Native Plant Society (CNPS) Electronic Inventory records (CNPS 2012) and Inventory of Rare and Endangered Vascular Plants of California (Tibor 2001)
- Lists of special-status species and natural communities that may occur in the project area as provided by the U.S. Fish and Wildlife Service and National Marine Fisheries Service (NMFS) (USFWS 2017), and CDFW (CDFW 2017)
- Soil and ecological maps and descriptions generated by the Natural Resources Conservation Service (NRCS 2012)
- Wetlands mapping from the USFWS National Wetlands Inventory (NWI) (USFWS 1987)
- CalFlora database in conjunction with the Jepson Herbarium database was consulted for site specific species cross referencing for potential rare plants in the project vicinity

To date, the following site visits and studies have been conducted within the project study boundary (PSB) in support of the project, including anticipated trail footprint and fill prisms, access routes, and staging areas for construction. On June 12, 2017, a botanical survey and habitat mapping occurred for Alternative 1 (Technical Memorandum included in Appendix C). A wetland delineation was performed on May 8-10 and June 12, 2017, for Alternative 1 PSB (GHD 2017b). On July 1, 2017, an additional site visit was conducted to evaluate presence of potential habitat for sensitive-listed wildlife species (table of database results and potential for species to occur is also attached in Appendix C). On September 7, 2017, GHD field staff returned to the site for reconnaissance (limited access to Alternative 2, east properties) wetland mapping and vegetation community evaluation for properties being considered for use which make up a part of Alternative 2 (where not coincident with Alternative 1 alignment), along the east side of SR 162. Reference Figures 2.1 through 2.16 in Appendix C for the wetland delineation figures.

Special-status Plant Species

Based on the results of the 2017 botanical survey for Alternative 1, federal or State special-status plants are not expected to occur in construction areas (trail alignment and staging areas), therefore, no impact to federal or State special-status plant species would occur with implementation of Alternative 1. The Alternative 2 eastern alignment (where it deviates from the Alternative 1 alignment east of SR 162) was not surveyed for target sensitive plant species because plant species were not within the bloom window and there was limited access at the time the Alternate 2, east alignment, was included as part of the project description. Additional seasonally appropriate survey(s) of this area will be necessary prior to construction; therefore, Mitigation Measure BIO-1 is included. Reference the botanical memorandum and table of potential wildlife species present in the project vicinity, both provided in Appendix C, for additional information on special-status species and the potential to occur in the project area.

Mitigation Measure BIO-1: Conduct Seasonally Appropriate Pre-construction Plant Surveys

- MCOG will ensure that if the Alternative 2 trail alignment, east section, is chosen that seasonally appropriate pre-project plant surveys shall be conducted during the seasonally-appropriate window when target plant species are in bloom, during 2018 spring/summer, or at a minimum, one year prior to the planned construction window so as to allow adequate time for seed collection for plant propagation and/or plant translocation, if sensitive plant species are found.
- If sensitive plant species are documented within the project footprint or temporary construction impact area for Alternative 2 and cannot be avoided, a species-specific Sensitive Species Mitigation Plan (SSMP) will be developed in the year prior to construction and submitted to CDFW for consideration. The plan will include species-specific measures for plant relocation, seed collection, and/or nursery plant propagation, replanting and monitoring. The SSMP will designate an appropriate site for mitigation to occur for sensitive plant impacts, either along the linear project corridor or at a nearby location. The SSMP will document suitable conditions for species-specific plant requirements at the mitigation site. The SSMP will provide a monitoring approach for no net loss of plant species within three years of implementation of the mitigation plan.
- The results of the plant survey are generally considered valid for up to two to three years depending on the potential plant species present. Surveys should be updated or preconstruction surveys utilized, if the project is not implemented prior to the current survey results expiring. Given the generally low quality habitat for sensitive-listed plant species in the project footprint and temporary impact areas, preconstruction surveys are not proposed within the Alternative 1 PSB if construction is conducted prior to expiration of the original botanical survey conducted in June 2017, construction occurring by 2020.

Implementation of Mitigation Measure BIO-1 would result in a less than significant impact to special-status plant species by requiring a plant survey prior to construction, a SSMP for plant relocation, seed collection, and/or nursery plant propagation and replanting if any sensitive plant species are present in the project footprint, with the result of no net loss of special-status plant species.

Special-status Wildlife Species

Special-status wildlife species that have been documented in the project vicinity and have a moderate to high likelihood of occurring in the project vicinity are listed and analyzed below. Temporary impacts could occur above the Ordinary High Water Mark (OHWM) within the riparian zones of Mill Creek for installation of bridge footings; this work would be initiated from above the riparian zone; with equipment working from the SR 162 corridor including shoulder areas within the trail area; and equipment would not be placed below the OHWM. Project work including bridge footings (pilings to be driven in) are not proposed to occur in Mill Creek or below the OHWM of Mill Creek, as mapped in the wetland delineation (GHD 2017b) and ground truthed during the September 2017 site visit. Analysis of potential impacts to specific species potentially present within the creek corridor, are analyzed below. Construction and operation of the project is not anticipated to directly disturb suitable habitat for sensitive fish species but may impact habitat for:

- Summer-run steelhead trout (*Oncorhynchus mykiss irideus*) (SSC) could be present in Mill Creek although the closest documented presence of steelhead is approximately 3,500 linear feet downstream from the project alignment. In 1996, CDFW sampling reported seven

steelhead approximately 6.7 miles upstream from the confluence of Mill Creek with the Eel River which is downstream from the project site. More recent data is not available as to the use of Mill Creek by steelhead. Summer run steelhead are therefore assumed present near the project site whenever water is present unless more recent data is collected. Only young of year and age 1+ have been documented to date. Adults could be present during summer months while they spend time in pools, awaiting rainfall to spawn between December-February, with adult outmigration in March. Juveniles typically out-migrate April through June.

The project has been designed to avoid placement of bridge footings and other activities below the OHWM of Mill Creek to minimize and avoid potential impacts to summer-run steelhead and sensitive aquatic species within Mill Creek. Additionally, "Environmental Protection Action 3" includes the placement of silt fencing and construction avoidance fence along the downslope edge of the disturbance area on the east and west side of Mill Creek above/along the OHWM or higher depending on the location of anticipated disturbance, which would assist to minimize and avoid sediment from entering the areas below the OHWM. Timely revegetation and use of biodegradable jute mesh within areas of disturbance above the OHWM and below the top of bank of Mill Creek is required through Mitigation Measure BIO-4 which would further assist to minimize and avoid potential for sediment to enter the creek once winter rains commence. With implementation of Mitigation Measure BIO-4 and project design that includes "Environmental Protection Action 3," additional species-specific mitigation is not deemed necessary for fisheries and impacts are determined to be less than significant. Pile driving would occur in proximity to Mill Creek. Work would likely occur in late summer or fall when Mill Creek in the project area is typically dry. In case any small remnant pools are present at the time of construction, Mitigation Measure BIO-4b is proposed to reduce impacts from pile driving to sensitive fish to less than significant.

- Foothill Yellow-legged Frog (*Rana boylei*) [CESA Candidate species] could be present in Mill Creek and could disperse beyond the wetted creek channel during the wet season to nearby streams. This species has also been found in leaky culverts and therefore cannot be ruled out for potential presence in wet areas associated with culverts. Foothill Yellow-legged Frogs (FYLF) could potentially occur along the edge of the creek not far from the project area. Although Mill Creek at the project site was dry in September 2017, Foothill Yellow-legged Frogs are known to congregate at small remnant pools or in damp crevices during the dry summer and fall months,

Seasonal avoidance with no work occurring in the wet season or during the April-May FYLF breeding season would reduce potential for impact to dispersing adult amphibians that could leave the wetted portion of the creek channel. Mitigation Measure BIO-2 requires pre construction surveys if the species has Candidate or other special-status listing at time of project implementation. Additionally, Environmental Protection Action 3 which includes the placement of silt fencing and construction avoidance fence along the downslope edge of the disturbance area on the east and west side of Mill Creek above/along the OHWM or higher depending on location of anticipated disturbance, would assist to minimize and avoid sediment from entering the areas below the OHWM. In case any small remnant pools are present at the time of construction, Mitigation Measure BIO-4b is proposed to reduce impacts from pile driving to FYLF to less than significant.

- As listed in Appendix C table, the following bird species as described below, have the potential for occurrence in the project vicinity. White-tailed Kite (*Elanus leucurus*) (CDFW Fully Protected Species - CFP), and Coopers hawk (*Accipiter cooperii*) (not listed) are common in the project area with foraging and possible nesting habitat in open grasslands

and oaks/riparian areas, respectively, within 500 feet of the project alignment. Oak Titmouse (*Baeolophus inornatus*) is common in the project area in oak woodlands and is a cavity nester, and could nest in the project vicinity. The following avian species are unlikely to nest in the project vicinity and their likely use of the area would be limited to foraging: Great Blue Heron (*Ardea herodias*); Tricolored Blackbird (*Agelaius tricolor*) (State Candidate) could forage in the project vicinity, although it is unlikely to breed onsite given it is a colony nester with a colony identified near the project site at the Wastewater Treatment Plant in 2010. Vaux's Swift (*Chaetura vauxi*) nests in snags which were not observed in the project vicinity.

Raptors or sensitive bird species were not observed in flight over the site during site visits nor has nesting been documented to date in the PSB, yet are highly mobile species with variable flight patterns and nesting preferences from year to year. Bank swallows have also been noted as possibly being found in the vicinity along the creek corridor based on CNDDDB BIOS mapping. To reduce the potential impact from project implementation, MCOG would implement Mitigation Measure BIO-3 to reduce the potential impact from project implementation,

The following bat species have moderate potential to occur in the project vicinity: *Antrozous pallidus* (pallid bat), *Corynorhinus townsendii* (Townsend's big-eared bat), *Lasiurus blossevillii* (western red bat), *Lasiurus cinereus* (hoary bat), *Myotis evotis* (long-eared myotis). These bat species are unlikely to nest onsite because of the highly disturbed and developed nature of the corridor with trees having disconnected cover, building eves not being proposed for removal or disturbance, and lack of other suitable habitat features. Mitigation for these bat species is not proposed.

Mitigation Measure BIO-2: Survey and (if necessary) Relocation of Sensitive Amphibian Species

MCOG shall ensure that preconstruction surveys for sensitive or Candidate listed amphibian species (such as the Foothill Yellow-legged Frog, depending on listing status at time of project implementation) shall be conducted within vegetated areas of the project footprint, culverts within the project footprint, and below the top of bank of Mill Creek within the project footprint and within a minimum 200 foot radius (where accessible) of pile driving locations, by a qualified biologist within 24 hours prior to the onset of vegetation clearing or ground disturbing work. Sensitive-listed amphibian species observed, if any, shall be relocated outside of the project impact area to nearby species-specific suitable and accessible habitat.

Mitigation Measure BIO-3: Conduct Bird Surveys for Protected Avian Species

1. MCOG shall ensure that seasonal avoidance of the March 15 – August 15 nesting season will be utilized when feasible, to avoid impacts to native bird species protected under the Migratory Bird Treaty Act that may be present within the project footprint or adjacent area during construction. Clearing of shrubs or other vegetation, if necessary for construction or maintenance, shall be conducted if possible during the fall and/or winter months from August 16 to March 14th, outside of the active nesting season. If vegetation removal or ground disturbance cannot be confined to work during the non-breeding season, the MCOG shall have a qualified biologist conduct preconstruction surveys within the vicinity of the impact area, to check for nesting activity of native birds and to evaluate the site for presence of raptors and special-status bird species. The biologist shall conduct a minimum of one day preconstruction survey within the 7-day period prior to vegetation removal and ground-disturbing activities. If ground disturbance and vegetation removal work lapses for seven days or longer during the breeding season, a qualified biologist shall

conduct a supplemental avian preconstruction survey before project work is reinitiated.

2. If active nests are detected within the construction footprint or within 500 feet of construction activities, the biologist shall have locations flagged that are supporting breeding, and MCOG will not begin ground disturbing work or vegetation removal inside the project avian buffers until the nests have fledged. Construction activities shall avoid nest sites until the biologist determines that the young have fledged or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within 500 feet of the construction area, buffers will be implemented as needed. In general, the buffer size for common species would be determined on a case-by-case basis in consultation with the CDFW. The buffer size for sensitive species would be 300 feet, and the buffer size for raptors would be 500 feet, if deemed appropriate in coordination with the CDFW.
3. Buffer sizes will take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviors of the nesting birds. The survey results will be reported to the CDFW prior to the commencement of construction activities.

As described in Section 1.5, “Environmental Protection Actions Incorporated into the Project,” MCOG would implement protection actions during construction to protect special-status wildlife species and habitats located in the vicinity of the project. Specific Environmental Protection Actions for reducing potential impacts to special-status wildlife species are outlined in Section 1.5, as part of Environmental Protection Action 3. With implementation of these Environmental Protection Actions, in concert with Mitigation Measure BIO-2, Mitigation Measure BIO-3, and Mitigation Measure BIO-4, the project's potential impact on candidate, sensitive, or special-status wildlife species from construction and operation would be less than significant.

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

Riparian Habitat

Riparian areas are those vegetated areas adjacent to rivers, streams and lakes with specific overstory and/or understory plant species that meet the definition of riparian by the CDFW. Riparian habitat is located along Mill Creek in the project vicinity. As described in the project description, Section 1.4.1, a pre-manufactured steel bridge would be placed over Mill Creek on the west side of SR 162. The steel bridge would be approximately 160 feet in length and 12 feet wide. Construction of the steel bridge may directly or indirectly impact riparian habitat which consists of a mix of oak riparian along top of bank of Mill Creek, with an herbaceous and willow mix below the top of bank. This would be mitigated through Mitigation Measure BIO-4 which proposes replacing impacted riparian areas onsite at a 1:1 ratio (based on square footage). Additionally, Environmental Protection Action 3 includes the placement of silt fencing and construction avoidance fence along the entire downslope edge of the disturbance area of the project alignment on the east and west side of Mill Creek above/along the OHWM or higher depending on location of anticipated disturbance, which will assist to minimize impacts adjacent to remaining riparian downslope from

the work area. Therefore, the impact to riparian would be less than significant with the following mitigation.

Mitigation Measure BIO-4a: Replacement of Impacted Riparian Vegetation

Where the bridge placement directly impacts riparian through vegetation removal, the following (or similar) planting plan will be implemented to re-establish and/or replace riparian vegetation impacted at a minimum 1:1 ratio. In areas where vegetation is temporarily impacted through construction activities, the replacement area will be onsite in the area of impact, to re-establish impacted vegetation. Where impacts are a result of direct impact such as from bridge footings, trail footprint, and/or fill slopes, replacement will be in an area adjacent to existing riparian so as to expand and/or fill in gaps in the existing riparian corridor.

For areas above the top of bank (TOB), the planting plan includes tree and shrub species similar to those anticipated to be impacted. For the area above the OHWM (i.e., not in stream channel), and below the TOB, a second planting plan is proposed that focuses on willow and herbaceous species along with hydroseeding, which is a similar assemblage to existing conditions. For impact areas between the OHWM and the TOB, the area will also be covered with one inch diameter biodegradable jute mesh.

All riparian impact areas and replacement areas will be broadcast or hydroseeded with native grass seed mix that includes not more than 50% sterile seed as a component of mix (refer to manufacturer's recommendation for maximum quantity of sterile seed recommended). Seeding shall occur after impact occurs and prior to onset of winter rains. Two implementation options exist for seeding: 1) may be before, or 2) after the planting plan is implemented, depending on when nursery stock is available and nursery contractor availability. If possible, seeding should occur immediately after impact (Option 1) so as to provide timely revegetation and ground cover of impacted area, with nursery contractor following up with implementing planting plan just prior to winter rains which would then provide passive irrigation for the nursery plants. If it is determined that implementation of the planting plan by nursery contractor would disrupt the seeded surface due to trampling, Option 2 approach would be to implement the planting plan immediately after impact occurs, with immediate follow up of seeding. Following is the recommended planting plan, with substitutions to plant species allowed if consulting with project biologist:

Planting plan above top of bank for temporary impacts:

- Arroyo willow (*Salix lasiolepis*) [may be salvaged from impact area and/or stakes cut from adjacent riparian]
- Coffeeberry (*Frangula californica*)
- Western mock orange (*Philadelphus lewisii*)
- Snow berry (*Symphoricarpos albus* var. *laevigatus*)
- Creek clematis (*Clematis ligusticifolia*)
- Mugwort (*Artemisia douglasiana*)
- Wild rye (*Elymus glaucus*) [may include additional native grass species in the mix for hydroseeding purposes]

Planting plan below top of bank for temporary impacts and for direct impacts:

- Arroyo willow (*Salix lasiolepis*) [may be salvaged from impact area and/or stakes cut from adjacent riparian]
- Creek clematis (*Clematis ligusticifolia*)
- mugwort (*Artemisia douglasiana*)
- Wild rye (*Elymus glaucus*) [may include additional native grass species in the mix for hydroseeding purposes]

Mitigation Measure BIO-4b: Pile Driving in Mill Creek

Pile driving near Mill Creek would occur in the dry season. If any remnant wetted channel is present within 200 feet of pile driving locations, then a qualified biologist would survey the pools and channel and relocate any native fish and frogs to the nearest suitable habitat outside of the potential impact area. Relocation efforts would be coordinated with NMFS and CDFW.

Impacts to oaks from bridge construction are described below.

Oak Woodlands

Oak trees present along the corridor may be directly impacted through removal if trunks are in the alignment of the construction footprint or fill slopes, and/or indirectly impacted where trail building activities, footprint, and future maintenance efforts occur within the drip line of the tree canopy. Oak trees were mapped along Alternative 1 and Alternative 2 alignments initially using remote sensing efforts from aerial maps using GIS, which was then ground truthed during multiple site visits in 2017 as to the location of oak tree drip line. Alternative 1 has estimated direct and indirect impacts (lumped together in calculation) to 0.60 acres (ac) of oaks. Alternative 2 has estimated direct and indirect impacts to 1.86 acres of oaks. This would be mitigated through Mitigation Measure BIO-5 which proposes replacing impacted oak trees at a 1:1 mitigation ratio for oak trees <12 inch diameter at breast height (dbh); 1.5:1 mitigation ratio for oak trees 12-18 inch dbh; and a 2:1 mitigation ratio for oak trees >18 inch dbh.

Operation of the project could directly or indirectly impact oaks through routine maintenance if immediately adjacent to the trail alignment. Therefore, trail footprint and fill slopes within the canopy of oaks, have been calculated as an indirect impact since future maintenance activities along the trail corridor could disturb the canopy of oaks, and mitigation for this impact is included in BIO-3. Additionally, Environmental Protection Action 3 includes the placement of silt fencing and construction avoidance fence along the entire downslope edge of the disturbance area of the project alignment on the east and west side of Mill Creek as necessary, which would help minimize impacts to those areas. Therefore, the impact to oak trees would be less than significant with the following mitigation.

Mitigation Measure BIO-5: Protection and Replacement of Oak Trees

MCOG will ensure that the following measures will be taken to reduce potential impacts to oak trees:

- Impacts to oak trees from construction and long-term operation will be calculated at the drip line (combines direct impacts to trunks and potential indirect impacts within the drip line). An arborist or biologist will conduct a tree survey prior to construction within areas where direct or indirect impacts to oaks are anticipated. The arborist or biologist will

document tree species and dbh of all oaks with canopy or trunks within the impact area. Project mitigation for direct and indirect impacts will be calculated as follows:

- <12 inch dbh will provide minimum of 1:1 mitigation ratio
- 12-18 inch dbh will provide minimum of 1.5:1 mitigation ratio
- >18 inch dbh will provide minimum of 2:1 mitigation ratio

The replacement species composition and exact number of trees to be planted at the mitigation area shall be subject to approval by CDFW. Although the project site has sufficient area to accommodate the required tree mitigation, alternative sites may be considered including local parks or schools or installation of trees on adjacent properties for screening purposes to the satisfaction of CDFW, Caltrans, the MCOG, and relevant property owners.

A Habitat Mitigation Plan (HMP) will be prepared that provides a description of the mitigation site, site selection criteria, and appropriate conditions of oak growth, plant propagation methods, acorn collection if any, implementation, maintenance, and monitoring, to be submitted to CDFW for consideration. The HMP will describe whether overplanting is recommended to allow for mitigation ratios to be achieved.

The following tree protection measures will also be included in the project in order to protect trees to be preserved during construction:

Pre-construction treatments:

1. The MCOG shall retain a consulting scientist (arborist or biologist). The construction superintendent shall meet with the consulting scientist before beginning work to discuss work procedures and tree protection.
2. Fence all trees to be retained within the trail and staging construction areas by a minimum of 10 feet beyond the drip line to completely enclose the Tree Protection Zones prior to staging, grubbing, or grading. Fences shall be orange construction avoidance fence staked at regular intervals of approximately 10 feet on center, or six foot chain link or equivalent as approved by consulting arborist or biologist. Fences are to remain until all grading and construction is completed.
3. If pruning of trees to be preserved is necessary to clean the crown and to provide clearance, all such activity shall be completed or supervised by an arborist or qualified biologist and follow the *Best Management Practices for Pruning of the International Society of Arboriculture*.

During construction:

1. No grading, construction, demolition or other work shall occur within the Tree Protection Zone. Any modifications must be approved and monitored by the consulting arborist or biologist.
2. Root pruning will be minimized, and if necessary, any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, a consulting arborist or biologist.
3. If injury should occur to any tree during construction, it shall be evaluated as soon as possible by the consulting arborist or biologist to determine if impact should be accounted for in the mitigation requirements.

4. No excess soil, chemicals, debris, equipment or other materials shall be placed or stored within the Tree Protection Zone.

Upon completion of construction, barren soil within the project site shall be seeded with a mixture of appropriate native seed mix and stabilizing emulsion to minimize the likelihood of erosion. Areas below the top of bank and above the OHWM will have biodegradable jute matting placed prior to seeding and will include supplemental perennial shrub plantings as well.

Implementation of Mitigation Measure BIO-5 would reduce impacts to oak trees to a less than significant level by requiring the placement of avoidance fencing, requiring the replacement of trees at selected ratios based on dbh, the preparation of a HMP, the inclusion of pre-construction and construction protective measures, and seeding to minimize erosion.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Less than Significant with Mitigation)

A wetland delineation was conducted on May 8-10 and June 12, 2017, for the project Alternative 1 alignment (GHD 2017b). The wetland delineation mapped the extent of wetland-types and waters based on the extent of wetland-type vegetation, hydric soils, and wetland hydrology in support of the USACE wetland definitions. The wetland delineation was completed pursuant to the U.S. Army Corps of Engineers (USACE) 1987 Manual, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coastal Regions* (Version 2.0) (USACE 2010). A jurisdictional determination has been requested, yet not processed, from the USACE (this would be accomplished as part of the project's permitting process); however, USACE verified three-parameter wetlands are subject to USACE jurisdiction. The four wetland classifications mapped within the Alternative 1 PSB, as well as quantification of each wetland category, is listed below. Alternative 2 alignment did not have a formal wetland delineation due to property access restraints, and actual wetland presence along Alignment 2 that were not coincident with Alignment 1, was field mapped at a reconnaissance level in September, 2017. Wetland types observed within the Alternative 2 alignment were similar to those classifications observed for Alternative 1, yet has not be quantified by wetland type due to the reconnaissance level of Alternative 2 wetland survey (although total wetland impacts for Alternative 2 are estimated herein).

The wetland delineation for Alternative 1 mapped three parameter wetlands and other waters (0.954 acres in total) as follows (Alternative 2 has similar wetland categories observed present yet is not quantified by wetland category due to reconnaissance level of field survey for Alternative 2). Wetland impacts for Alternative 1 are as follows:

- Palustrine Emergent – Ditch (PEM1m), 0.317 acres (13,825 sq. ft.).
- Palustrine Emergent (PEM1), 0.313 acres (13,619 sq. ft.).
- Open water – fresh (OHWM) ditch, 0.007 acres (305 sq. ft.).

Impacts to wetlands for the Alternative 1 alignment have been calculated as 0.64 acres (which includes 3, a combination of palustrine emergent wetland, palustrine emergent ditch, and open freshwater ditch). Impacts associated Alternative 2, which includes the impacts associated with Alternative 1 where coincident, plus estimated impacts where Alternative 2 deviates from Alternative 1 based on reconnaissance mapping of approximate wetland boundary, totals 0.67 acres (combination of palustrine emergent wetland and palustrine emergent ditch). No impacts to Mill Creek OHWM are anticipated as no work is proposed below the OHWM in Mill Creek.

The loss of wetlands is a significant impact; however, implementation of Mitigation Measure BIO-6 would reduce the impact to a less than significant level.

Mitigation Measure BIO-6: Mitigate Direct and Temporary Impacts to Wetlands during Construction

MCOG shall ensure that if the Alternative 2 alignment is selected, a complete USACE wetland delineation will be completed for the alignment where not coincident with Alternative 2, the results of which will be submitted to the USACE for jurisdictional determination. Further, for either alignment option, as part of project design, the Applicant/ MCOG will work with the project engineer to design a replacement wetland ditch or OHWM ditches along the trail alignment in areas where the trail will impact roadside regulated wetland ditch at a minimum of 1:1 ratio. For impacts to other regulated wetland types not categorized as wetland ditch, MCOG will ensure that impacted USACE wetlands will be mitigated at a location agreed upon with the appropriate regulatory agencies and at the ratio (minimum 1:1) specified in permit special conditions to ensure no net loss. Mitigation would include wetland areas that would be re-established, established, enhanced, and/or preserved. This measure would mitigate both the permanent onsite loss of wetlands as a result of the proposed project and also the temporary construction impacts. The wetland mitigation would need to provide the same or similar ecological functions as the impacted wetlands. This would include re-establishing, establishing, enhancing, and preserving wetlands with a similar hydrologic regime, and similar vegetation types. The wetland mitigation should be designed to function with the intact wetland features of the mitigation area. As a result, not all wetland mitigation sites may serve exactly the same function, but each area should contribute to the diversity of the ecosystem as a whole.

Mitigation Measure BIO-6 requires temporary impacts to wetlands during construction be mitigated, restoration of pre-project conditions at the conclusion of construction, and requires mitigation for permanently impacted wetlands, thereby reducing any potential impacts to wetlands to a less than significant level.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (No Impact)

Wildlife movement corridors are areas that connect suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, changes in vegetation, or human disturbance. Natural features such as canyon drainages, ridgelines, or areas with vegetative cover provide wildlife corridors. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas, and facilitate the exchange of genetic traits between populations.

Mill Creek is considered a movement corridor for fish (including Steelhead [RVIT 2017]) and the adjacent riparian zone serves as a corridor for movement of wildlife species, including amphibians, birds and mammals. As described in the project description, Section 1.4.1, a pre-manufactured steel bridge would be placed over Mill Creek on the west side of SR 162. The steel bridge would be approximately 160 feet in length and 12 feet wide and would have impact in the riparian zone of Mill Creek, but no work will occur within the creek channel (no work proposed below the OHWM). Thus, construction activities would not impede movement by aquatic or wildlife species within Mill Creek and the adjoining riparian zone. Additionally, as described in Section 1.5, "Environmental Protection Actions Incorporated into the Project," MCOG would implement protection actions during

construction to protect special-status wildlife species and habitats located in the vicinity of the project. The impact during construction would be less than significant.

Following construction, the proposed project would not create an impediment to wildlife movement. No operational impact would occur.

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

The Mendocino County General Plan includes several biological resources policies that call for the protection of biological diversity and productivity (Policy RM-71); the avoidance of sensitive resources and environments (Policy RM-73); the protection and continuity of natural habitats and hydrology (Policy RM-81); the conservation and use of native species or drought-tolerant, fire resistive and noninvasive vegetation (Policy RM-82); and to conserve and enhance streamside (riparian) vegetation through development design and standards (Policy RM-90). As described in Section 1.5, "Environmental Protection Actions Incorporated into the Project," MCOG would implement protection actions during construction to protect water resources, fish and wildlife resources, and natural resource areas located in the vicinity of the project. With implementation of the environmental protection actions in Section 1.5, the project would not conflict with applicable County of Mendocino General Plan policies protecting biological resources. 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)

Currently there are no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans that cover the project area. No impact would occur.

3.5 Cultural Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historic property that qualifies as a historical resource as defined in §15064.5?			✓	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		✓		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
d) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

The CEQA Guidelines define a historical resource as: (1) a resource listed in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in the California Public Resources Code (PRC) Section 5020.1(k), or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency’s determination is supported by substantial evidence in light of the whole record.

a) Cause a substantial adverse change in the significance of a historic property that qualifies as a historical resource as defined in §15064.5? (Less than Significant)

According to the cultural resource study prepared for the project (Tom Origer & Associates 2017), buildings within the study area would not be impacted by the proposed project. Therefore, the proposed project would have no impact to a historic property and the impact would be less than significant. Subsurface historic-period archaeological resources are evaluated in “b” below.

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

According to the cultural resources study prepared for the project (Tom Origer & Associates 2017), the records search at the Northwest Information Center (NWIC) indicates that the project PSB had been previously surveyed. Three cultural resources have been recorded within the PSB. These resources are all prehistoric archaeological sites. Because of the sensitivity of cultural resources, the cultural resources study is not included in this report and the location of cultural resources is confidential; therefore, not included. An additional six cultural resources have been recorded within ¼-mile of the PSB. These six resources consist of four prehistoric archaeological sites, a collapsed windmill with a cement water trough, and the Round Valley Flour Mill (National Register #80000820).

The potential exists to encounter as-of-yet unknown archaeological materials along the alignment during project-related construction activities. A substantial change to or destruction of these resources could be a potentially significant impact; therefore, the following mitigation is included.

Mitigation Measure CR-1: Protect Archaeological Resources during Construction Activities

MCOG shall ensure that the following measures are taken during construction activities to protect known and unknown archaeological sites and resources.

Site P-23-000267 - The recorded area of this site plus a 10-meter buffer shall be fenced prior to construction so that it will not be damaged by staging area use.

Site P-23-001086 - This site is located at the eastern edge of one of the proposed staging areas. No evidence of the site was found, however, to ensure that the site is protected the staging area shall be restricted to the land within 60 meters of SR 162. This will allow for a 10-meter buffer between the recorded site boundary and any staging area activities.

Site P-23-001183 – If the project cannot be redesigned to avoid the site, then the project contractor shall cover the portion of the site that will be impacted by the project plus a 10-meter buffer with geofabric and covered with soil so that the trail can be constructed on top of the archaeological site. Covering the site with geofabric (recommended by tribal representatives) and soil must be conducted in such a way so that no ground disturbing activities occur to the site. Any vegetation removal prior to covering the site, and placement of geofabric and soil should be overseen by an archaeologist who meets the Secretary of the Interior's Standards.

Trailside Foundation – If the trail can't be designed to be at least five feet from the foundation then it is recommended that the eastern edge of the foundation be fenced, and a training session be conducted for the construction crew so that they are made aware of the presence of this resource and the need to avoid it.

In the event that any subsurface archaeological features or deposits, including locally darkened soil, are discovered during construction-related earth-moving activities, the MCOG shall halt all ground-disturbing activity in the vicinity of the resources and a qualified professional archaeologist/tribal representative shall be retained to evaluate the find. If the find is determined to constitute either an historical resource or a unique archaeological resource per CEQA Guidelines sections 15064.5, the archaeologist shall develop appropriate mitigation to protect the integrity of the resource and ensure that no additional resources are affected. Mitigation could include but would not necessarily be limited to avoidance, preservation in place, archival research, subsurface testing, or excavation and data recovery.

Implementation of Mitigation Measure CR-1 would reduce this impact to a less-than-significant level for both construction and operation because a plan to avoid known archaeological sites, to address discovery of unanticipated buried cultural resources, and to preserve and/or record those resources consistent with appropriate laws and requirements would be implemented.

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

Paleontological resources are the remains or traces of prehistoric animals and plants. Paleontological resources, which include fossil remains and geologic sites with fossil-bearing strata are non-renewable and scarce and are a sensitive resource afforded protection under

environmental legislation in California. Under California Public Resources Code (CPR) Section 5097.5, unauthorized disturbance or removal of a fossil locality or remains on public land is a misdemeanor. State law also requires reasonable mitigation of adverse environmental impacts that result from development of public land and affect paleontological resources (CPR Section 30244).

According to the Mendocino County General Plan, the vast majority of the county is underlain by bedrock of the Franciscan Formation. Thick soil development and landslides very commonly cover the underlying bedrock throughout the county. Due to the weak and deformed nature of the Franciscan rocks, they are prone to deep weathering and development of thick overlying soils.

Although it is unlikely that project construction would impact potentially significant paleontological resources, it cannot be ruled out altogether. Therefore, the potential impact is considered significant and the following mitigation is included.

Mitigation Measure CR-2: Protect Paleontological Resources during Construction Activities

In the event that any vertebrate fossils are encountered during construction, MCOG shall temporarily halt all ground disturbing activities within 50 feet of the discovery, the County Planning and Building Services department shall be notified, and a qualified paleontologist shall be retained to determine the significance of the discovery. The MCOG shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries. The MCOG shall consult and agree upon implementation of a measure or measures that they deem feasible and appropriate. Such measures may include avoidance, preservation in place, excavation, documentation, curation, data recovery, or other appropriate measures. The MCOG will implement the agreed upon mitigation measures necessary for the protection of paleontological resources.

Mitigation Measure CR-2 would reduce the impact of construction activities on potentially unknown paleontological resources to a less-than-significant level by addressing discovery of unanticipated buried resources and preserving and/or recording those resources consistent with appropriate laws and requirements. Operational impacts on paleontological resources are not anticipated.

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

The Round Valley Indian Reservation Headquarters Cemetery is located at the northwest corner of Biggar Lane and SR 162. While current project plans show that the trail is located on the east side (outside) of the cemetery fence, the project will be immediately adjacent to the cemetery. It is unlikely that undiscovered human remains are present within the construction areas given that the majority of the project area has been disturbed by previous development. However, the possibility of encountering human remains during construction cannot be completely discounted, therefore, the impact related to the potential disturbance or damage of previously undiscovered human remains, if present, is considered potentially significant.

Mitigation Measure CR-3: Protect Human Remains if Encountered during Construction

MCOG shall immediately notify the Mendocino County Coroner should human remains, associated grave goods, or items of cultural patrimony be encountered during construction, and the following procedures shall be followed as required by Public Resources Code § 5097.9 and Health and Safety Code § 7050.5. In the event of the coroner's determination that the human remains are Native American, notification of the Native American Heritage

Commission, which would appoint a Most Likely Descendant (MLD). A qualified archaeologist, MCOG and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects. The agreement would take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, and final disposition of the human remains and associated or unassociated funerary objects.

Mitigation Measure CR-3 would reduce the impact of construction activities on potentially unknown human remains to a less-than-significant level by addressing discovery of unanticipated remains, associated grave goods, or items of cultural patrimony consistent with appropriate laws and requirements. Operational impacts on human remains are not anticipated.

3.6 Geology and Soils

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? 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 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?				✓

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)

The Alquist-Priolo Act (Public Resources Code Sections 2621–2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The purpose of

the Act is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The project does not include structures designed for human occupancy. Additionally, neither of the proposed trail alignments would cross an active Alquist-Priolo fault mapped by the California Geological Survey. No impact has been identified.

As described in Section 1.5, “Environmental Protection Actions Incorporated into the Project,” the project would be designed and constructed in conformance with the site-specific recommendations contained in the geotechnical report prepared for the project and any subsequent project-related geotechnical reports. This would include, but not be limited to, pavement recommendations, new embankment support, subgrade conditions, retaining structures, bridge foundation recommendations, and soil corrosivity for culvert design. The project’s fault rupture related impacts would be less than significant with regard to construction and operation.

a.ii) Strong seismic ground shaking? (Less than Significant)

Strong seismic shaking is a regional hazard that could cause major damage to the project area. The extent of ground-shaking during an earthquake is controlled by the earthquake magnitude and intensity, distance to the epicenter, and the geologic conditions in the area.

Mendocino County is in an active earthquake area. Five known faults or fault zones traverse Mendocino County with the Round Valley Fault traversing near the project alignment in a northwest-southeast axis. The Round Valley Fault has not been found to exhibit activity more recently than 1.6 million years ago, although study has been very limited. A few micro-earthquakes have been recorded in the vicinity of the fault, particularly at the southern end. The Round Valley Fault is considered potentially active (Mendocino County 2009b).

As described in Section 1.5, “Environmental Protection Actions Incorporated into the Project,” the project would be designed and constructed in conformance with the site-specific recommendations contained in the geotechnical report prepared for the project and any subsequent project-related geotechnical reports. This would include, but not be limited to, pavement recommendations, new embankment support, subgrade conditions, retaining structures, bridge foundation recommendations, and soil corrosivity for culvert design. Adherence to the recommendations in the geotechnical report during construction and operation would result in a less than significant impact.

a.iii) Seismic related liquefaction? (Less than Significant)

Liquefaction is the transformation of saturated, loose, fine-grained sediment to a fluid-like state because of earthquake shaking or other rapid loading. Liquefaction is known to occur in loose or moderately saturated granular soils with poor drainage.

The proposed project would not include residential development, occupied structures, or critical facilities that would be subject to liquefaction. According to the Mendocino County General Plan, Round Valley is in an alluvial basin where the subsurface conditions are locally conducive to liquefaction (Mendocino County 2009b).

As described in Section 1.5, “Environmental Protection Actions Incorporated into the Project,” the project would be designed and constructed in conformance with the site-specific recommendations contained in the geotechnical report prepared for the project and any subsequent project-related geotechnical reports. This would include, but not be limited to, pavement recommendations, new embankment support, subgrade conditions, retaining structures, bridge foundation recommendations, and soil corrosivity for culvert design to address liquefiable soils. Adherence to

the recommendations in the geotechnical report during construction and operation would result in a less than significant impact with regard to seismic related liquefaction.

a.iv) Landslides? (Less than Significant)

The project area does not have the potential for landslides as the project area is on relatively flat land. The only project component that would likely present a landslide hazard in the event of a seismic incident is the bridge over Mill Creek; however, all constructed features would comply with the latest version of the California Building Code (CBC), including the requirements of the special Seismic Design Category zones, and the site-specific recommendations contained in the geotechnical report prepared for the project. Adherence to the CBC and recommendations in the geotechnical report during construction and operation would result in a less than significant impact with regard to landslide hazards.

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

Construction activities, including cut, fill, removal of vegetation, and operation of heavy equipment would disturb soil and, therefore, have the potential to cause erosion. These activities would be performed in compliance with the Best Management Practices (BMPs) prescribed in the Mendocino County Municipal Code, National Pollutant Discharge Elimination Standards (NPDES) Phase II regulations and the CBC. BMPs may include: silt fences, straw bales and wattles, soil stabilization controls, site watering for controlling dust, and sediment detention basins. In areas where the trail would be located within close proximity to wetlands or special-status plants, BMPs would be implemented to prevent erosion and sedimentation from trail construction. Protection measures include a stormwater pollution prevention plan (SWPPP) which would be required prior to any grading or construction activities in excess of one acre. Therefore, no substantial soil erosion or loss of topsoil would result from the project and a less than significant impact is expected to occur as a result of the project.

Following construction, the project would not result in soil erosion or loss of topsoil, as disturbed areas would be restored to general pre-construction conditions and no additional ground disturbance would occur. Therefore, no operational impact would occur.

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? (Less than Significant)

The proposed project is not located in an area prone to on- or off-site landslide, lateral spreading, subsidence, or collapse; nor would construction or activities after construction increase the likelihood of creating on- or off-site landslide, lateral spreading, subsidence, or collapse. Reference Section a) iii, above for a discussion on liquefaction. Soils in the vicinity of both project alignment alternatives generally consist of a mix of loam, sandy loam, gravelly sandy loam, clay loam, and silty clay (USDA 2016).

The project would comply with the seismic requirements of the CBC and is on predominately flat ground with no potential for landslides. As described in Section 1.5, "Environmental Protection Actions Incorporated into the Project," the project would be designed and constructed in conformance with the site-specific recommendations contained in the geotechnical report prepared for the project and any subsequent project-related geotechnical reports. This would include, but not be limited to, pavement recommendations, new embankment support, subgrade conditions, retaining structures, bridge foundation recommendations, and soil corrosivity for culvert design to address liquefiable soils. Project adherence to the recommendations in the geotechnical report

during construction and operation would result in a less than significant impact with regard to landslide, lateral spreading, subsidence, or collapse.

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

Expansive soils are generally high in certain clay types and are prone to large volume changes that are directly related to changes in water content. Soils found in both project alignment alternatives are generally loam and gravelly and sandy loam (USDA 2016). These types of soils are not high in clay and therefore not considered expansive soils. As described in Section 1.5, "Environmental Protection Actions Incorporated into the Project," the project would be designed and constructed in conformance with the site-specific recommendations contained in the geotechnical report prepared for the project and any subsequent project-related geotechnical reports. Adherence to the recommendations in the geotechnical report during construction and operation would result in a less than significant impact with regard to expansive soils creating substantial risks to 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? (No Impact)

The project would not involve the use of septic tanks or other alternative wastewater disposal systems. Therefore, no impact would occur.

3.7 Greenhouse Gas Emissions

	Potentially Significant Impact	Less-than-Significant with 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, b) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation? (Less than Significant)

Climate change refers to change in the Earth’s weather patterns including the rise in the Earth’s temperature due to an increase in heat-trapping greenhouse gases (GHG) in the atmosphere. Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, emissions of GHGs that contribute to global warming or global climate change have a broader, global impact. Global climate change is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the Earth’s atmosphere. The principal GHGs contributing to global warming are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and fluorinated compounds. These gases allow visible and ultraviolet light from the sun to pass through the atmosphere, but they prevent heat from escaping back out into space. Among the potential implications of global warming are rising sea levels, and adverse impacts to water supply, water quality, agriculture, forestry, and habitats. Like most criteria and toxic air contaminants, much of the GHG production comes from motor vehicles. GHG emissions can be reduced to some degree by improved coordination of land use and transportation planning at the city, county and subregional level, and other measures to reduce automobile use. Energy conservation measures also can contribute to reductions in GHG emissions.

Project construction activities would result in a temporary increase in greenhouse gas emissions, primarily in the form of carbon dioxide from exhaust emissions associated with haul trucks, construction worker commute vehicles, and construction equipment. There is currently no applicable federal, State, or local standard or significance threshold pertaining to construction-related greenhouse gas emissions. The MCAQMD recommends use of the BAAQMD’s CEQA thresholds of significance. However, the BAAQMD does not have screening criteria or significance thresholds for construction-related greenhouse gas emissions. However, the BAAQMD does recommend that lead agencies quantify and disclose construction-related greenhouse gas emissions. Therefore, the project’s construction emissions were quantified, annualized over an assumed operational lifespan, and added to operational greenhouse gas emissions in order to determine the project’s potential impact.

The BAAQMD CEQA Guidelines contain the following operational significance thresholds for greenhouse gas emissions:

- Compliance with a Qualified Greenhouse Gas Reduction Strategy; or

- 1,100 metric tons of carbon dioxide equivalent (MT CO_{2e}) per year; or
- 4.6 MT CO_{2e} per service population (residents plus employees) per year.

The BAAQMD has also established a significance threshold of 10,000 metric tons per year for operation-related greenhouse gas emissions from stationary sources.

Construction and Operational Impact

Project construction activities would result in a temporary increase in GHG emissions, including exhaust emissions from on-road haul trucks, worker commute vehicles, and off-road heavy-duty equipment. Construction would require clearing, earthmoving, hauling, and delivery equipment, as used for similar projects, and which have been accounted for in the State's emission inventory and reduction strategy for both on and off-road vehicles. Construction emissions were estimated using CalEEMod version 2016.3.1. Construction activity and duration is expected to be substantially similar for both alternatives. Therefore, the emissions output is representative of each alternative. Project construction emissions are estimated to be approximately 208 MT CO_{2e} from all construction activities. The project's construction emissions equal 6.95 MT CO_{2e} per year when annualized over the assumed 30-year lifespan of the project.

Operation and maintenance of the project would generate less than one traffic trip per day on average. The project would not increase the County's population or bring new, permanent employees to the project area. As such, the project would not result in substantial long-term operational emissions of GHGs. Total project emissions (operations plus annualized construction) would be less than eight MT CO_{2e} per year, which is substantially less than the emission threshold of 1,100 MT CO_{2e}. Therefore, the project would generate a less than significant impact.

The project is also evaluated for consistency with the ARB *First Update to the Climate Change Scoping Plan*. The Climate Change Scoping Plan released by the ARB provided strategies for meeting the near-term 2020 greenhouse gas emission reduction goals in AB 32. The *First Update to the Climate Change Scoping Plan* provides recommendations for establishing a mid-term emissions limit that aligns with the long-term (2050) goals of Executive Order S-3-05, which consists of reducing greenhouse gas emissions to 80 percent below 1990 levels. The recommendations cover the energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green building, and cap-and-trade sectors, and are to be implemented by a variety of State agencies.

Although project construction may benefit (have a reduced generation of GHG) from implementation of some of the State-level regulations and policies, such as the Phase 2 heavy-duty truck greenhouse gas standards proposed to be implemented within the transportation sector, the project would not impede the State in meeting the AB 32 greenhouse gas reduction goals. The recommended next steps in the *First Update Climate Change Scoping Plan* are broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of smaller individual infrastructure projects such as the proposed project. Therefore, the project would not conflict with AB 32 or the Climate Change Scoping Plan, and would result in a less than significant impact.

3.8 Hazards and Hazardous Materials

	Potentially Significant Impact	Less-than-Significant with 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 for people residing or working in the project area?				✓
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				✓
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?		✓		

a, b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or upset and accident conditions? (Less than Significant)

Construction activities would involve the use of hazardous materials, such as fuels, lubricants, paints and solvents. These materials are commonly used during construction, are not acutely hazardous and would be used in small quantities. Regular transport of such materials to and from the project alignment during construction could result in an incremental increase in the potential for accidents. However, numerous laws and regulations ensure the safe transportation, use, storage and disposal of hazardous materials. For example, Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers.

Worker safety regulations cover hazards related to the prevention of exposure to hazardous materials and a release to the environment from hazardous materials use. The California Division of Occupational Safety and Health (Cal-OSHA) also enforces hazard communication program regulations, which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparation of health and safety plans to protect workers and employees. Contractors would be required to comply with existing and future hazardous materials laws and regulations covering the transport, use and disposal of hazardous materials, the impacts related to hazardous materials used during project construction.

The Initial Site Assessment (GHD 2017c) prepared for the project identified five sites within the PSB with the potential to encounter impacted soil and groundwater during construction. Those five sites are as follows:

1. US Forest Service Covelo Station (Hazard Rank 3).
2. Caltrans Covelo Maintenance Station (Hazard Rank 2).
3. APN 033-230-22 (Hazard Rank 3).
4. Poli Property (Hazard Rank 2).
5. SR 162 Corridor (Hazard Rank 3).

Hazard ranks are defined as follows: **Hazard Rank 1** - A site that will likely affect project construction. Contamination of soil and/or groundwater is confirmed to be within the project alignment; **Hazard Rank 2** - A site with the potential to affect the project, either because of the presence of contamination that may likely migrate into the project area or because the extent of contamination is unknown; **Hazard Rank 3** - A site that is not known to be contaminated, but due to current or historical use could possibly have contamination that could affect project construction; and **Hazard Rank 4** - A site that has little or no potential to affect the project.

Construction workers have the potential to be exposed to hazardous contaminants. Earthmoving activities may expose workers to dust containing contaminants; therefore, the following mitigation is included.

Mitigation Measure HAZ-1: Impacted Soil and Groundwater Sampling and Analysis

MCOG shall ensure that its contractors who impact soil and groundwater within 15 feet of sites assigned a Hazard Rank of 2 or 3 shall sample and characterize (via laboratory analysis) the material prior to construction activities. During construction if buried wood

waste, debris, or suspected impacted soil is encountered, the material shall be separated, stockpiled, and characterized via laboratory analysis. If groundwater is anticipated to be encountered within 15 feet of Hazard Rank 2 or 3 sites then it shall also be sampled and laboratory analyzed prior to construction. Potential constituents of concern (COC) for soil at groundwater for Hazard Rank 2 and 3 sites within the project site are included on Table 1 of the GHD Initial Site Assessment (October 2017). Site workers involved in excavation and dewatering activities shall be Hazardous Waste Operations and Emergency Response (HAZWOPER) trained.

Implementation of Mitigation Measure HAZ-1 would reduce impacts to a less than significant level by requiring that potentially hazardous contaminants found in soil and groundwater be sampled and characterized (and treated, if necessary) prior to off-site disposal.

Following construction, operation of the project would not result in the need for new hazardous materials that would need to be transported, used, or disposed. No operational impact would occur.

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 existing or proposed schools within 0.25 mile of either project alignment alternatives. Round Valley High School is located on Howard Street approximately 0.4 mile from the intersection of SR 162 and Howard Street. Therefore, no impacts would occur related to emissions or handling of materials in close proximity to schools.

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? (No Impact)

No portion of the project alignment would be located on any of the lists compiled pursuant to Government Code Section 65962.5, known as the Cortese List (CalEPA 2017). The closest Cortese List site is the Poli Property, located at 76381 Covelo Road, just south of the intersection of Howard Street and SR 162 (SWRCB 2017). This site is a leaking underground storage tank site that is "Open – Inactive as of 6/7/13." Therefore, the proposed project would not be located on a Cortese List site and would not create a significant hazard to the public or environment. No impact would occur.

e, f) 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 for people residing or working in the project area? (No Impact)

The Round Valley Airport is located less than a mile to the southwest of the project alignment alternatives at the intersection of Howard Street and SR 162. However, no aspect of the project would result in an airport-related safety hazard for people residing or working in the project area. There are no other public or private airports/airstrips within two miles of the project alignment alternatives. Therefore, no potential safety hazards associated with airports would occur.

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

The project would not modify any existing roadways in a manner that would impede emergency access or evacuation. Construction activities would not physically interfere with an adopted emergency response plan or emergency evacuation plan. Similarly, operation of the project would

not impair or interfere with an emergency response plan or emergency evacuation plan. No impact would occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (Less than Significant with Mitigation)

The project alignment alternatives are located on lands designated both Federal Responsibility Area (FRA) and Local Responsibility Area (LRA) by the California Department of Forestry and Fire Protection (CAL FIRE 2007). California law requires CAL FIRE to identify areas based on the severity of fire hazard that is expected to prevail there. LRA designated lands along both project alignment alternatives include LRA Unzoned, Other Unzoned, Other Moderate, and LRA Moderate. The farther you go in all directions from Covelo and the entire Round Valley the higher the fire hazard severity zone.

Temporary water storage tanks may be used during construction, but no dedicated fire suppression water tanks are proposed. Construction involving heavy equipment, vehicles, power tools, and personnel potentially smoking in and around the project sites could cause the ignition of a wildfire. Although the vegetative characteristics along the project alignment alternatives present only a moderate fire hazard, during warm, dry, and or windy, weather conditions a grass fire originating in the project area could spread quickly to pose a potential risk to surrounding property and people. This would be a significant impact.

Mitigation Measure HAZ-2: Prepare and Implement Fire Safety Plan

In coordination with MCOG, the construction contractor shall develop and implement a Fire Safety Plan for use during project construction. The Fire Safety Plan shall be submitted to the Covelo Fire Department for review and approval prior to commencement of construction. The Fire Safety Plan shall contain the following requirements:

- Fires shall be immediately reported to 911 and the Covelo Fire Department.
- The construction contractor shall maintain fire toolbox pursuant to California Code - Section 4428.
- Fire safety measures shall be posted for the duration of construction on the project bulletin board at the contractor's field office or other central location and areas visible to employees.
- All internal combustion engines used at the site shall be equipped with spark arresters in working order, as applicable.
- Mufflers on motor vehicles shall be maintained in good working order and motor vehicles shall only be used off-road if the area has been cleared of vegetation.
- Equipment parking areas and small stationary engine sites shall be cleared of all flammable materials.
- Personnel shall be trained in the practices of the Fire Safety Plan relevant to their duties.
- Smoking shall be limited to 15' x 15' paved or gravel areas or areas cleared of all combustible vegetation.
- Any construction contract(s) for the project shall state the requirements of this mitigation measure.

Implementation of Mitigation Measure HAZ-2 would reduce impacts to a less than significant level by requiring fire safe practices during project construction.

3.9 Hydrology and Water Quality

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?			✓	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			✓	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off- site?			✓	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off- site?			✓	
e) 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?			✓	
f) Otherwise substantially degrade water quality?			✓	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				✓
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				✓
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				✓

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
j) Inundation by seiche, tsunami, or mudflow?				✓

a) Violate any water quality standards or waste discharge requirements? (Less than Significant)

Minor grading necessary to construct the trail would be conducted in accordance with the erosion control measures described in the Mendocino County Code, CBC, California Stormwater Quality Association BMP guidelines and the regulations of the Regional Water Quality Control Board (RWQCB). Because the project involves only minor vegetation removal, excavation, grading and other earthwork activities, and includes BMPs, no violations to water quality standards or waste discharge requirements are expected to result. If minor earthwork activities need to occur outside the dry season, they would be conducted in accordance with the requirements of the Mendocino County Code and RWQCB. The project would require the preparation of a Mendocino County Grading Permit and adherence to erosion control measures identified in Section 18.70.130 of the Mendocino County Code. Implementation of BMPs and erosion control measures would reduce potential water quality impacts during project construction activities to a less-than-significant level by requiring measures to control erosion and sedimentation of receiving water bodies. As a result, the potential impact on water quality during construction and operation would be less than significant.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? (Less than Significant)

Water would only be used during construction for dust suppression on local roadways and work areas. Any water table draw-down during project construction would be very minor and localized and would not affect the ability of any off-site wells to draw water nor cause groundwater drawdown. Therefore, no substantial deficit in aquifer volume or interference would be expected to occur. The construction-related impact on groundwater levels would be less than significant.

Following construction, the project would not utilize groundwater and would not result in an increase in population or employment that would indirectly increase groundwater demand. Therefore, the project would not create a deficit in aquifer volume or a lowering of water levels. Additionally, the amount of impervious surface created by the project is minimal when compared to the remaining adjacent undeveloped surfaces, thereby not affecting groundwater recharge. The project is not expected to result in any change in the use or recharge of any groundwater source. No operational impact would occur.

c, d, e, f) Substantially alter the existing drainage pattern resulting in substantial erosion or siltation or flooding, 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 on- or off- site, or degrade water quality? (Less than Significant)

Areas disturbed during construction would generally be restored to pre-construction conditions, and the project would result in a minimal increase in new impervious surface associated with the paved portion of the trail. The project would not result in a substantial change to drainage patterns, would not alter the course of a stream or river, would not substantially increase surface runoff, or create substantial additional sources of polluted runoff. To mitigate for potentially significant runoff impacts that could result in minor erosion, completion of a SWPPP to the satisfaction of the RWQCB is required because the project includes more than one acre of ground disturbance. The preparation of a SWPPP and adherence to the RWQCB's requirements for the preparation of SWPPP's would result in a less than significant impact on stormwater-related siltation and erosion on- or off-site, or flooding on- or off-site.

The SWPPP would incorporate BMPs as appropriate. No debris, soil, silt, sand, slash, sawdust, rubbish, cement or concrete washings, oil or petroleum products, or other organic or earthen material from construction operations would be allowed to enter or be placed where it may become entrained in any flowing or standing water. Erosion control measures and BMPs would be implemented during all phases of construction. No motorized vehicles other than maintenance vehicles would be allowed on the trail; therefore, oil, gas or other fluids would not be expected to be a significant source of polluted stormwater runoff.

Due to the factors above, it has been found that the project would not result in significantly increased erosion or sedimentation potential and would not permanently alter any drainage patterns of the site or area on- or off-site. Therefore, the project would have a less than significant impact.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (No Impact)

The project does not include the construction of new homes and would not indirectly induce housing growth as it would not extend infrastructure into new areas and would not increase the overall capacity of the local water/wastewater systems. Therefore, this evaluation criterion is not applicable to the project. No impact would occur.

h, i) Place structures within a 100-year flood hazard area or expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? (No Impact)

The Federal Emergency Management Agency (FEMA) issues Flood Insurance Rate Maps identifying land areas that are subject to flooding. According to FEMA Flood Insurance Rate Map Number 06045C0536F, the project alignment alternatives are not within the 100-year flood zone (FEMA 2011). Therefore, the project would not place structures within a 100-year flood hazard area. No impact would occur.

According to the Mendocino County Multi-Hazard Mitigation Plan, the project area is not within a dam failure inundation area and there are no levies in the vicinity; therefore, no impact from flooding as a result of the failure of a levee or dam would occur (Mendocino County 2014).

j) Inundation by seiche, tsunami, or mudflow? (No Impact)

Based on area characteristics, the project sites are not down-gradient of a debris-flow source and would not be subject to mudflows. The project sites are also not near any enclosed water body capable of producing a seiche event. Covelo is approximately 32 miles from the coast; therefore, a tsunami off the coast of California would have no effect on the community and surrounding area. No impact would occur.

3.10 Land Use and Planning

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				✓
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				✓
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				✓

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

The project would involve construction and operation of a multi-purpose Class I bicycle and pedestrian trail parallel to SR 162 between the town of Covelo and the Round Valley Indian Reservation’s administrative services. Neither Alternative 1 or Alternative 2 would divide any existing neighborhood or the community of Covelo, rather it would provide for a more convenient and safer connection between the Round Valley Indian Reservation and Covelo. No impact would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (No Impact)

Applicable land use plans covering the project area include the Mendocino County General Plan, and the County’s Zoning code. The County’s General Plan land use designations along the project alignment alternatives include Remote Residential, Public Lands, Agriculture, Rural Residential, and Commercial. County zoning along the project alignment alternatives include R3, PF, AG, UR, and C1.

The Mendocino County General Plan includes Goal DE-8 (Transportation), which in part, “promotes a choice of modes accessing and connecting places frequented in daily life.” Goal DE-10 (Pedestrian & Bicycle) calls for “functional, safe and attractive pedestrian and bicycle systems coordinated with regional and local transportation plans and other transportation modes.” Policy DE-93 calls for creation of “pedestrian connectivity between land uses, including residential, schools, commercial and job centers, parks and open space.” Policy DE-152 says that the “County shall ensure that bicycle facilities are safe, attractive, and useful for both recreational and commuting cyclists.” Policy DE-153 calls for the County to “provide pedestrian and bicycle ways along public roadway systems consistent with community area goals and policies and where sufficient right of way is available.”

The project is consistent with the General Plan goals and policies above. Other specific Mendocino County General Plan goals, policies and standards adopted for the purpose of avoiding environmental effects are evaluated in this document under the corresponding issue areas; for example, policies related to biological resources are evaluated in Section 3.4 Biological Resources.

The proposed Class I multi-purpose trail would not permanently alter the existing land uses or their designations or zoning, and would not introduce new land uses or land use designations or zoning; therefore, no conflict with applicable land use plans, policies, or regulation(s) would occur.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? (No Impact)

Currently there are no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans that cover the project area. No impact would occur.

3.11 Mineral Resources

	Potentially Significant Impact	Less-than-Significant with 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?			✓	

a, b) Result in the loss of availability of a known mineral resource that would be of value to the region or delineated by a General Plan, Specific Plan or other land use plan? (Less than Significant)

The proposed project would require minor use of quarry rock, gravel, sand, and other similar materials, but is not expected to have any significant impact on locally available minerals or mineral resources valuable to the region or State. There are no locally important mineral resource recovery sites in the project vicinity, and the project alignment alternatives contain no mineral resources that would be impacted by the project. The impact is less than significant.

3.12 Noise

	Potentially Significant Impact	Less-than-Significant Mitigation Incorporated	with	Less-than-Significant Impact	No Impact
Would the project:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✓			
b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?				✓	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				✓	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		✓			
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 expose people residing or working in the project area to excessive noise levels?					✓
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?					✓

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Less than Significant with Mitigation)

The Mendocino County General Plan Noise Element (adopted August 2009) sets forth goals and policies related to noise and land use compatibility. Policy DE-98 states that the county will protect residential areas and other noise-sensitive uses from excessive noise by requiring that new land

uses, new roadways, and other new noise sources do not create unacceptable noise levels on adjacent parcels. Policy DE-100 sets county standards for maximum exterior noise levels for residential uses. In the Single-Family Homes and Duplexes category, the noise standards would be 60 dBA daytime (7:00 AM to 10:00 PM), 50 dBA evening (10:00 PM to 7:00 AM). In the Multiple Residential 3 or More Units Per Building category, the noise standards are 5 dBA higher than the Single-Family Homes and Duplexes category in the evening. Policy DE-101 includes noise compatibility guidelines for use in determining the general compatibility of planned land uses. For residential land uses less than 55 dBA is completely compatible; 55-60 dBA is tentatively compatible; 60-75 dBA is normally incompatible; and greater than 75 dBA is completely incompatible.

The closest residences to construction activities are those just north of the SR 162/East Lane intersection, which are within 25 feet of Alternative 1. Most of the other residences along the project alignment alternatives are much farther away. In order to prevent construction noise from disturbing homes and businesses in the project vicinity during the generally quieter nighttime hours, construction activities would be limited to the hours of 7:00 AM to 7:00 PM on weekdays, 8:00 AM to 6:00 PM on Saturdays, and no work on Sundays and Holidays except in emergencies or with prior approval from the County of Mendocino (Mitigation Measure NOI-1). With mitigation incorporated, the minor incremental increase in noise associated with trail construction, use, and maintenance activities would not expose persons to noise levels in excess of applicable standards and would not represent a significant increase in noise. The impact is less than significant with mitigation incorporated.

Mitigation Measure NOI-1: Hours of Construction

MCOG shall ensure that construction activities will be limited to the hours of 7:00 AM to 7:00 PM on weekdays, 8:00 AM to 6:00 PM on Saturdays, and no work on Sundays and Holidays except in emergencies or with prior approval from MCOG.

No nighttime construction is planned so there would be no nighttime noise. No impact would occur. Following construction, no aspect of the project would generate noise in excess of standards established in the General Plan or other applicable standards of other agencies, aside from vehicles used for general maintenance. The impact would be less than significant.

b) Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels? (Less than Significant)

The construction of the project may generate vibration when heavy equipment or impact tools (e.g. jackhammers, vibratory compaction equipment, pile drivers) are used. Construction activities would include grading, compacting, paving, and five days of impact pile driving, which can cause noticeable vibration.

For structural damage, Caltrans recommends a vibration limit of 0.5 in/sec Peak Particle Velocity (PPV) for buildings structurally sound and designed to modern engineering standards, 0.3 in/sec 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 in/sec PPV for very old buildings or buildings that are documented to be structurally weakened. No known very old buildings or buildings that are documented to be structurally weakened adjoin the project area. Therefore, conservatively, groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in a significant vibration impact.

Table 3.12-1 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. High-power or vibratory tools and rolling stock equipment (tracked vehicles, compactors, etc.), may generate substantial vibration in the immediate vicinity. Impact pile drivers typically generate vibration levels of 0.644 in/sec PPV, potentially reaching levels up to 1.158 in/sec PPV, and vibratory rollers typically generate vibration levels of 0.210 in/sec PPV at a distance of 25 feet. Vibration levels are highest close to the source and attenuate with increasing distance at a rate of $\left(\frac{D_{ref}}{D}\right)^{1.1}$, where D_{ref} is 25 feet and D is the distance from the source to the receptor, in feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used.

Table 3.12-1 Typical Vibration Levels for Construction Equipment

Equipment	PPV at 25 ft. (in/sec)	Approximate Lv at 25 ft. (VdB)
Pile Driver (Impact)	0.644 – 1.158	1-4 - 112
Pile Driver (Sonic)	0.170 – 0.734	93 - 105
Clam Shovel Drop	0.202	94
Hydromill (slurry wall)	0.017 (in rock) – 0.008 (in soil)	75 (in rock) – 66 (in soil)
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large Bulldozer	0.089	87
Caisson drilling	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Transit Noise and Vibration Impact Assessment, United States Department of Transportation, Office of Planning and Environment, Federal Transit Administration, May 2006.

The distances used above to estimate construction noise were measured from approximately the center of the proposed trail to the nearest building façades. These same distances were used to estimate vibration levels at the receptors adjacent to the project corridor.

For Alternative 1 in the north-south direction, the residences located along the project corridor are set back approximately 55 to 1,865 feet from the center of the proposed trail. At 55 feet, the nearest residence would be exposed to vibration levels up to 0.088 in/sec PPV, and the residence at a distance of 1,865 feet would be exposed to vibration levels up to 0.002 in/sec PPV. The commercial buildings along Alternative 1 north-south alignment would have setbacks ranging from 10 to 400 feet. At distances of 10 feet, vibration levels would for a clam shovel drop would be 0.553 in/sec PPV and for a vibratory roller would be 0.575 in/sec PPV, which would both exceed the 0.3 in/sec PPV threshold. With the exception of these equipment and pile drivers, which would not apply to this section of the project, the remaining equipment would generate vibration levels up to 0.244 in/sec PPV at 10 feet. At 400 feet, vibration levels up to 0.010 in/sec PPV would occur.

Under the conditions of Alternative 2 in the north-south direction, residences would be set back approximately 35 to 1,800 feet from the proposed walking path. At 35 feet, vibration levels up to 0.145 in/sec PPV could be expected, while vibration levels up to 0.002 in/sec PPV could be expected at 1,800 feet. Commercial buildings under Alternative 2 would have setbacks ranging from 10 feet, which would be the same as Alternative 1 previously discussed, to 355 feet. At 355 feet, vibration levels would be up to 0.011 in/sec PPV.

The nearest residence located north and south of the east-west alignment of the trail would be located approximately 10 feet south of the proposed trail, and this residence would be exposed to vibration levels up to 0.553 in/sec PPV from a clam shovel drop and up to 0.575 in/sec PPV from a vibratory roller. The remaining residences along the east-west trail would range from 50 to 710 feet from the center of the proposed trail. At 50 feet, vibration levels would be up to 0.098 in/sec PPV, while at 710 feet, vibration levels would be up to 0.005 in/sec PPV. Commercial buildings would be more than 200 feet from this part of the trail and would be exposed to vibration levels up to 0.021 in/sec PPV.

During construction of the trail, residences would be set back 95 to 1,010 feet, which would expose them to vibration levels up to 0.048 in/sec PPV. The nearest commercial buildings would be set back 115 to 500 feet. At these distances, vibration levels would be up to 0.039 in/sec PPV. The Round Valley United Methodist Church would be approximately 150 feet from the center of the trail, and at this distance, vibration levels would be up to 0.029 in/sec PPV.

Pile driving activities would occur at Mill Creek, and the nearest residences would be set back 210 to 1,060 feet from the center of the proposed trail. The nearest commercial buildings would be 695 to 1,150 feet from the pile driving. At 210 feet, vibration levels from impact pile driving would typically be 0.062 in/sec PPV, with an upper range of 0.111 in/sec PPV. The further receptors would be exposed to vibration levels below that.

Modification, placement, and operation of construction equipment are possible means for minimizing the vibration impact on existing nearby structures, particularly the residence and commercial buildings located 10 feet from the proposed walking trail. To reduce the potential for significant impacts associated with vibration the following mitigation is included.

Mitigation Measure NOI-2: Implement BMPs during Construction

- The contractor shall alert heavy equipment operators to the close proximity of the adjacent structures so they can exercise extra care.
- The contractor shall retain a qualified firm to conduct a pre- and post-construction cosmetic crack survey of the buildings located within 20 feet of the trail and shall repair any additional cosmetic cracking.
- Limit the use of heavy vibration-generating construction equipment within 20 feet of the buildings located along the project corridor.

Implementation of Mitigation Measure NOI-2 would reduce adverse effects caused by construction vibration to a less than significant level by repairing any cosmetic cracks in buildings within 20 feet and by limiting the use of heavy vibration-generating construction equipment.

c) Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (Less than Significant)

The project is an active transportation facility with recreational benefits; motorized vehicles would be prohibited on the facility. The project does not involve any operational feature that would cause any permanent increase to noise levels. The project would, therefore, not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. The impact is less than significant.

d) Substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Less than Significant with Mitigation)

A construction noise and vibration assessment report was prepared for the project by Illingworth and Rodkin, Inc. (Illingworth and Rodkin, Inc. 2017). Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the 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 immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time.

The County of Mendocino does not define allowable construction hours in the General Plan or Municipal Code and does not provide maximum construction noise levels. Thresholds for speech interference indoors is 45 dBA. Assuming a 15 dBA exterior-to-interior reduction for standard residential construction and a 25 dBA exterior-to-interior reduction for standard commercial construction, this would correlate to an exterior threshold of 60 dBA Leq at residential land uses and 70 dBA Leq at commercial land uses. Additionally, temporary construction would be annoying to surrounding land uses if the ambient noise environment increased by at least 5 dBA Leq for an extended period of time. Therefore, the temporary construction noise impact would be considered significant if project construction activities exceeded 60 dBA Leq at nearby residences and hotels or exceeded 70 dBA Leq at nearby commercial land uses and exceeded the ambient noise environment by 5 dBA Leq or more for a period longer than one year.

The existing receptors along the project corridor consist of retail commercial uses, a fire station, government buildings, and casino and retail located on the reservation; single-family residences; a church; and a concrete facility. Image 1 and Image 2 show the project corridor and label the nearby receptors. According to the September 2008 General Plan Update Draft Environmental Impact Report for the County of Mendocino, the existing 2007 and future 2030 noise levels along SR 162 were 63 dBA CNEL, as measured at a distance of 50 feet from the centerline of the roadway. This would represent the ambient noise environment for each of the existing receptors.

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. The highest maximum noise levels generated by typical daily construction activities would range from about 80 to 90 dBA Lmax at a distance of 50 feet from the noise source (Table 3.12-2). Impact pile driving would generate maximum noise levels up to 105 dBA Lmax at a distance of 50 feet. Typical hourly average construction-generated noise levels for roadway-type projects are about 78 to 88 dBA Leq measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.), as shown in Table 3.12-3. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain can provide an additional 5 to 10 dBA noise reduction at distant receptors.

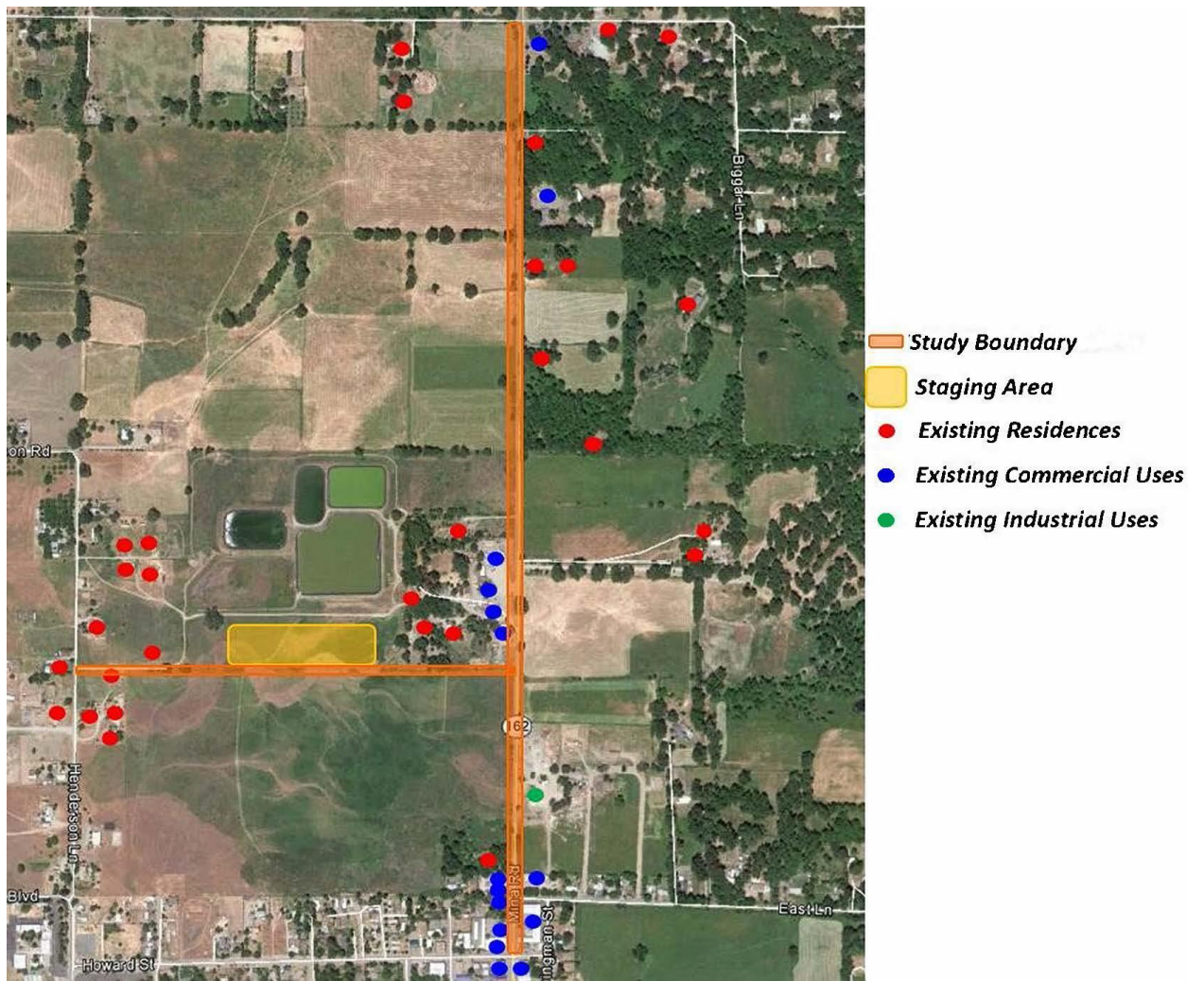


Image 1 Project Corridor and Nearby Receptors

(Source: Illingworth & Rodkin 2017)

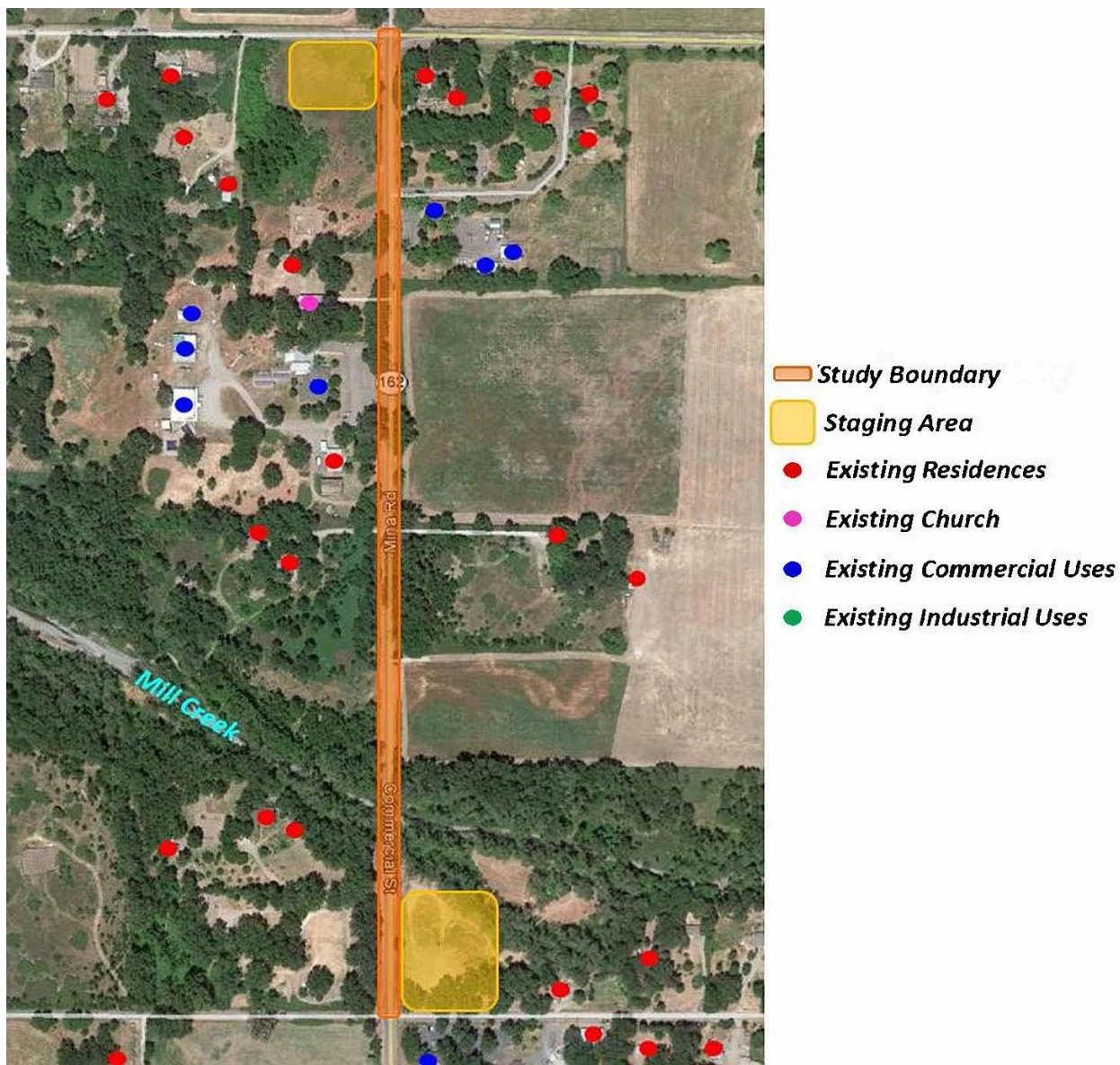


Image 2 Project Corridor and Nearby Receptors
 (Source: Illingworth & Rodkin 2017)

Table 3.12-2 Construction Equipment Noise Levels

Construction Equipment	Noise Level (dBA L _{max} at 50 feet)
Backhoe	78
Front end loader	79
Cement and mortar mixer	79
Concrete/asphalt saw	90
Crane	81
Excavator	81
Generator	81
Horizontal boring hydraulic jack	82
Jackhammer	89
Paver	77
Pumps	81
Roller	80
Separation plant	81
Truck-mounted drill rig	79
Tractor trailer 20 yd	77
Truck	74

Source: FHWA 2006

Table 3.12-3 Typical Ranges of Construction Noise Levels at 50 Feet, Leq (dBA)

	Domestic Housing		Office Building, Hotel, Hospital, School, Public Works		Industrial Parking Garage, Religious Amusement & Recreations, Store, Service Station		Public Works Roads & Highways, Sewers, and Trenches	
	I	II	I	II	I	II	I	II
Ground Clearing	83	83	84	84	84	83	84	84
Excavation	88	75	89	79	89	71	88	78
Foundations	81	81	78	78	77	77	88	88
Erection	81	65	87	75	84	72	79	78
Finishing	88	72	89	75	89	74	84	84

Source: U.S.E.P.A., Legal Compilation on Noise, Vol. 1, p. 2-104, 1973.

- Notes: I. All pertinent equipment present at site.
 II. Minimum required equipment present at site.

Representative sound levels for the most common types of construction equipment and usage factors, contained in the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM), were used to calculate noise levels related to planned construction activities based on the equipment list summarized in Table 3.12-4. The cumulative noise level would assume all pieces of construction equipment operating simultaneously along the trail corridor and represents a

conservative worst-case prediction of temporary construction noise levels during each construction phase.

Table 3.12-4 Construction Phasing Information

Phase	Duration	Equipment (Quantity)
Site Preparation	3 weeks	Rubber-Tired Dozer (3) Tractor/Loader/Backhoe (4)
Grading	3 months	Excavator (2) Grader (1) Rubber-Tired Dozer (1) Scraper (2) Tractor/Loader/Backhoe (2)
Paving	6 weeks	Paver (2) Paving Equipment (2) Roller (2)

Source: Illingworth & Rodkin Inc. 2017

Construction noise levels do not include the impact pile driving expected to occur for five days at the Mill Creek crossing. The nearest residences to the south of the Mill Creek bridge work would range from 210 to 1,060 feet from the nearest pile driving activities. These distances include the nearest residences east and west of SR 162. At these distances, the hourly average noise levels for pile driving activities would range from 68 to 82 dBA Leq, with maximum instantaneous noise levels up to 93 dBA Lmax. The commercial buildings located to the south of Mill Creek would be 695 to 845 feet from the nearest pile driving activities, and at these distances, hourly average noise levels would range from 70 to 71 dBA Leq, with maximum noise levels up to 82 dBA Lmax. North of Mill Creek, the nearest residences are 650 to 905 feet from the proposed pile driving activities. At these distances, hourly average pile driving would range from 69 to 72 dBA Leq, with maximum noise levels up to 83 dBA Lmax. The nearest commercial buildings north of the creek would range from 1,105 to 1,150 feet from the pile driving. At these distances, hourly average noise levels would be about 67 dBA Leq, with maximum noise levels up to 78 dBA Lmax. Typically, pile driving is conducted separate from other construction activities, and if other work along the path was being done concurrently with pile driving, noise levels from pile driving would dominate the noise environment.

Additionally, the truck traffic along SR 162 would temporarily increase by up to 20 trucks per day. Based on the most recent annual average daily traffic (AADT) published by Caltrans¹ for trucks along SR 162, the temporary increase in truck traffic would result in up to a 1 dBA increase in noise levels along the project corridor. The temporary increase in noise levels due to truck traffic would not be significant.

Construction activities would consistently increase ambient noise levels by up to 20 dBA at the nearest receptors along the corridor throughout construction. Temporary construction noise would exceed 60 dBA Leq at the surrounding residences and would exceed 70 dBA Leq at the surrounding commercial uses on the busiest days throughout construction. During pile driving, noise levels at the nearest noise-sensitive receptors would be substantially higher. However, construction of the entire project would last for a duration of six months and would not cause any permanent noise increase at the surrounding receptors. Reasonable regulation of the hours of

¹ <http://www.dot.ca.gov/trafficops/census/>

construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction material, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life.

The MCOG shall require the contractor to adhere to the following construction best management practices mitigation to reduce construction noise levels emanating from the site and minimize disruption and annoyance at existing noise-sensitive receptors along the project corridor.

Mitigation Measure NOI-3: Implement BMPs during Construction

MCOG shall develop a construction noise control plan, including, but not limited to, the following available controls:

- Limit construction hours to between 7:00 a.m. and 7:00 p.m., Monday through Saturday.
- Noise due to extreme noise-generating construction activities, such as pile driving activities, shall be minimized to the extent feasible. Pile driving activities and other noisy construction activities shall be completed as quickly as possible to limit noise exposure. Select less sensitive periods for pile driving, such as weekdays during mid-day hours.
- Neighbors located along the project corridor shall be notified of the construction schedule in writing, especially prior to pile driving activities.
- Construct temporary noise barriers, where feasible, to screen stationary noise-generating equipment. Temporary noise barrier fences would provide a 5 dBA noise reduction if the noise barrier interrupts the line-of-sight between the noise source and receiver and if the barrier is constructed in a manner that eliminates any cracks or gaps.
- All equipment driven by internal combustion engines shall be equipped with mufflers, which are in good condition and appropriate for the equipment. Electrical equipment shall be selected, where feasible.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors.
- The construction contractor shall utilize “quiet” models of air compressors, ventilation fans, and other stationary noise sources where technology exists.
- Locate material stockpiles, as well as maintenance/equipment staging and parking areas, as far as feasible from residential receptors.
- Control noise from construction workers’ radios to a point where they are not audible at existing residences bordering the project site.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the

cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

The implementation of Mitigation Measure NOI-3 above would reduce construction noise levels emanating from the site in order to minimize disruption and annoyance. With the implementation of these controls, and considering that construction is temporary, the disturbance caused by construction of the proposed project would be less than significant.

e, f) Exposure of people residing or working near a private or public airport to excessive noise levels? (No Impact)

The southern terminus of the project alignment is located less than a mile from the Round Valley Airport; however, project construction and operation would include only ground-based, non-motorized travel, and because the project is not growth inducing, it would not affect air traffic patterns or levels. Additionally, given the nature of the project, it would not introduce new permanent residents or employees to the area. Therefore, there would be no impact from exposing people to excessive noise levels attributable to airport operations and flights.

3.13 Population and Housing

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

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (No Impact)

The Round Valley Indian Reservation, the unincorporated community of Covelo and its surrounding area, which encompasses approximately 44 square miles, has a population of roughly 4,000 people. The Round Valley Indian Reservation is the second largest Reservation in California, in terms of population, with approximately 2,800 members living in the area. Mendocino County's poverty rate is above the Statewide average. Native American and low-income communities are frequently located in isolated rural areas like Round Valley in Mendocino County and are frequently disadvantaged in terms of employment opportunities, access to transportation, goods, services and public health.

The proposed multi-purpose trail would reduce the potential for conflicts between bicyclists, pedestrians, and vehicles within the SR 162 Corridor and increase mobility options in the community. The project does not include the construction of new homes or businesses in the area. The project would not indirectly induce population growth because it would not extend infrastructure into new areas not already served by the community of Covelo or Round Valley Indian Reservation. It would not result in the extension of utilities or roads or other infrastructure into outlying areas and would not directly or indirectly lead to the development of new sites that would induce population growth. In addition, implementation of the project would not result in a direct or indirect increase in employment opportunities that could increase the local population. Therefore, no impact to population growth would occur.

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

No homes or people would be displaced as a result of project construction or operation. Therefore, no impact would occur.

3.14 Public Services

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service 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)**

Implementation of the project would not induce population growth and, therefore, would not require expanded fire or police protection facilities to maintain acceptable service ratios, response times, or other performance objectives. The project would also not result in an increase in the County's student population, and therefore, no new or expanded schools would be required.

The project would present a new transportation facility that offers passive recreational opportunities by increasing trail connectivity. The project would not result in the increased use of existing parks and other public facilities as it would not induce population growth. The project would also not require the expansion of recreational facilities to maintain acceptable service ratios in parks, and would not require the expansion of other public facilities. No impact on public services would occur.

3.15 Recreation

	Potentially Significant Impact	Less-than-Significant with 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?			✓	

a, b) 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, or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (Less than Significant)

The project would have a long-term positive effect on recreation by increasing recreational opportunities in the area. The proposed multi-purpose trail would increase non-motorized transportation in the area making it convenient and safer for people to connect with critical activity centers within the community, including schools, the downtown center, tribal facilities, and residential areas.

The proposed project would not lead to an increase in the use of recreational facilities that would contribute to the physical deterioration of other recreational facilities. Trails are generally low maintenance facilities and the additional wear-and-tear would be minimal.

The proposed trail is a transportation facility that offers passive recreational opportunities that could encourage the construction of other recreational facilities, predominantly other connecting trails or trail-related facilities. Future connecting and related trail and recreational facility projects with the potential to cause significant environmental impacts would be subject to CEQA review and other environmental regulations enacted to protect the environment. Therefore, a less than significant impact is expected to occur.

3.16 Transportation/Traffic

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			✓	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				✓
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e) Result in inadequate emergency access?			✓	
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			✓	

- a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? (Less than Significant)**

Construction

Construction would result in vehicle trips by construction workers and haul-truck trips for material off-haul and deliveries. The anticipated haul truck route to the project area would be from Highway 101 from the south to SR 162 through Covelo. Construction-related traffic would be temporary, would vary on a daily basis, and would be spread out over the course of a work day.

As identified in the Project Description, Section 1.4.4 (Construction Access and Hauling Traffic), the number of construction-related vehicles traveling to and from the project area would vary on a daily basis. For the purposes of analysis, it is anticipated that on any one day during construction, up to 20 vehicle round trips could occur. Because the project's contribution of construction traffic would be temporary (approximately six months) and distributed throughout a work day, roadway segments in the vicinity of the construction sites would have sufficient capacity to accommodate the temporary increase in construction traffic. The temporary construction impact on the circulation system would be less than significant.

In accordance with County of Mendocino and Caltrans requirements, the construction contractor would be required to obtain an encroachment permit from the County and Caltrans for any portion of work completed within the County's ROW and SR 162. The encroachment permit applications would include a traffic and pedestrian control plan for work that would block the public right-of-way, and would include plans for re-routing of vehicles, bicycles and pedestrians. Traffic controls would be required in accordance with County and Caltrans standards, and contractors would be required to comply with the general conditions of the encroachment permits. Therefore, through compliance with local requirements, construction activities would not result in substantial adverse effects or conflicts with the local roadway system. The impact would be less than significant.

Operation and Maintenance

Once complete, the proposed project is not expected to increase vehicle traffic on area streets, as it is not intended to increase the area's population or redirect traffic patterns. The project would most likely decrease vehicle trips within the area by encouraging non-motorized forms of travel (walking, bicycling, skateboarding, rollerblading, etc.). The proposed multi-use trail would provide increased opportunities and routes for safe non-motorized travel within the area. Any potential increase in traffic generated by public visitation to the proposed trail and associated access areas would likely be offset by increased non-motorized travel to and from the area by trail users. Therefore, operation of the project would not cause congestion that would affect the performance, or level of service, of local roadways. The impact would be less than significant.

- b) **Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? (No Impact)**

The project area is not subject to a Congestion Management Program (CMP) and does not have a traffic congestion problem, with all area streets and roads operating below capacity. No impact would occur.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (No Impact)

The project alignment alternatives are located less than a mile from the Round Valley Airport; however, project construction and operation would include only ground-based travel, and because the project is not growth inducing, it would not affect air traffic patterns or levels. No impact would occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Less than Significant)

The project would not change the geometry of the street or roadway network. Therefore, no potentially hazardous roadway design features would be introduced by the project. If Alternative 1 is chosen then the trail would be routed along the west side of SR 162, so there would be no crossing of the highway by bicyclists or pedestrians until they reached Covelo if they decided to cross SR 162 using the crosswalk. Alternative 2; however, would cross SR 162 at Biggar Lane from west to east and then back again across SR 162 from east to west at the driveway entrance to Hidden Oaks Casino. Crosswalks at these crossings would be striped and also include pedestrian crossing signs to alert motorists. Alternative 2 would be less safe than Alternative 1; however, it would still be much safer than under existing conditions where there is no sidewalk and no shoulder along SR 162.

The proposed trail may impact transportation and/or traffic safety at the crossings with Hidden Valley Casino and the Round Valley Indian Reservation's administrative services; however, traffic is minimal within these areas and the trail would be along the properties' eastern edge. The trail would be separated from these crossings by features such as: differentiated pavement coloring, a barricade, intersection signage for motorists and trail users.

Roadway and driveway crossings will be ADA-accessible and include warning signage and markings both on the trail and the approaching vehicular way as applicable. In addition, signage would be added along the trail warning users of curves, bends, and other hazardous situations. Speed control can only be maintained through signage and other visual cues; speed bumps or other surface irregularities are not permitted to control the speed of bicycles and other non-motorized vehicles.

Based on the information above, the proposed project would not substantially increase hazards due to a design feature; therefore, the impact is less than significant.

e) Result in inadequate emergency access? (Less than Significant)

Emergency access to the proposed project alignment alternatives already exist as the project alignment alternatives would run parallel to, and in close proximity to SR 162. During construction all properties with existing access to SR 162 would continue to have access.

Removable bollards could be placed at trail intersections and entrances to prevent all but emergency and maintenance vehicles from entering. The proposed project would improve emergency access to the area by providing a multi-purpose trail corridor that would increase emergency access between Covelo and Hurt Road at SR 162. A less than significant impact would occur.

Following construction, all properties along the project alignment alternatives would continue to have emergency access. No operational impact on emergency access would occur.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? (Less than Significant)

There are no public transportation or bus stops in the project area. Pedestrian and bicycle facilities in the project area are limited. SR 162 from Covelo to Hurt Road has no sidewalks for pedestrians and no roadway shoulder for bicyclists. The project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, but would rather implement such plans. The proposed project planning began in 2012 with a Technical Advisory Group kick-off meeting and has since then included tribal engagement, community workshops, media coverage, and youth engagement. The project is consistent with and would implement the goals and policies identified in Section 3.10 (Land Use and Planning).

The proposed project would not conflict with any plan or program regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. As noted previously, an encroachment permit application would be required from the County and Caltrans and would include a traffic and pedestrian control plan for work that might block the public right-of-way, and would include plans for the temporary re-routing of vehicles, bicycles and pedestrians if needed. Traffic controls would be required in accordance with County standards, and contractors would be required to comply with the general conditions of the encroachment permits. The impact is less than significant.

3.17 Tribal Cultural Resources

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

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

As of the writing of this report, no Native American tribes have requested formal notification from MCOG of proposed projects per PRC Section 21080.3.1.

The potential exists to encounter as-of-yet unknown tribal cultural resources materials along the project alignment alternatives during project-related construction activities. If such resources were to represent “tribal cultural resources” as defined by CEQA, any substantial change to or destruction of these resources would be a potentially significant impact.

Mitigation Measure TCR-1: Protect Tribal Cultural Resources during Construction Activities

In the event that any tribal cultural resources are discovered during construction-related earth-moving activities, MCOG shall halt all ground-disturbing activity in the vicinity of the resources and an appropriate tribal representative(s)/archaeologist shall be notified. If the find is determined to constitute a tribal cultural resource per Public Resources Code Section 21074, the appropriate tribal representative(s)/archaeologist shall develop appropriate mitigation to protect the integrity of the resource and ensure that no additional resources are affected. Mitigation could include but would not necessarily be limited to avoidance, preservation in place, archival research, subsurface testing, or excavation and data recovery.

Implementation of Mitigation Measure TCR-1 would reduce this impact to a less-than-significant level because a plan to address discovery of unanticipated buried tribal cultural resources and to preserve and/or record those resources consistent with appropriate laws and requirements would be implemented.

3.18 Utilities and Service Systems

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				✓
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✓
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			✓	
e) 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?				✓
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			✓	

a, b, e) Exceed wastewater treatment requirements of the RWQCB, or require the construction of new water or wastewater treatment facilities, or have adequate wastewater capacity? (No Impact)

The proposed project does not involve the use or construction of any facilities that would require new water or wastewater infrastructure and would therefore have no impact.

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Less than Significant)

As discussed in Hydrology and Water Quality, above, there are no proposed changes to drainage patterns associated with the proposed project. There are a number of new storm drain culverts that would be installed along the project alignment alternatives. To mitigate for potentially significant runoff impacts that could result in erosion, completion of a SWPPP to the satisfaction of the

RWQCB is required because total ground disturbance is more than one acre. The preparation of a SWPPP and adherence to the RWQCB's requirements for the preparation of SWPPP's would result in a less than significant impact.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (Less than Significant)

Potable water in the project area is provided by private wells by the Round Valley County Water District and the Covelo Community Services District (CSD) provides water to the community of Covelo. Traditionally, the Round Valley area has been considered a water-rich area due to a high water table. Historical data dating back to 1960, provided by the Department of Water Resources indicates consistent ground water levels between 10 and 20 feet below surface level. This data indicates sufficient groundwater in the Covelo area to accommodate projected growth (Mendocino County 2009a).

The project may require the temporary use of water for construction, establishment of vegetation, and during routine maintenance operations. These minor water demands would not require or result in the construction of new water supply facilities or new water entitlements; therefore, a less than significant impact is anticipated.

f, g) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and comply with federal, state, and local statutes and regulations related to solid waste? (Less than Significant)

There are no landfills in Mendocino County. Solid waste generated in the county is exported for disposal to the Potrero Hills Landfill in Solano County. There is a small volume transfer station in Covelo which is privately operated under an agreement with Mendocino County. The Round Valley Recycling Center is also located in Covelo. The project is not expected to generate a significant increase of services for solid waste disposal needs. The proposed trail would generate limited solid waste during both construction and operation. Construction solid waste would include the one-time temporary generation of construction waste associated with the proposed development of the trail. Recyclable construction materials (e.g. scrap metal, wood, concrete, glass) could be shipped to local businesses for reuse, with non-recyclable materials sent to the transfer station in Covelo. (Mendocino County 2009b)

The project would include waste receptacles, spaces for recycling bins, and pet waste stations. The county has a franchise agreement for waste collection along SR 162, which would cover the project. Solid waste collected as a part of the project would be disposed of at the Covelo Transfer Station then hauled to a licensed landfill such as Potrero Hills Landfill in Solano County in compliance with local, state, and federal regulations pertaining to solid waste disposal. This landfill has sufficient capacity to serve the project's solid waste disposal needs, and a less than significant impact is anticipated.

3.19 Mandatory Findings of Significance

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

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

Environmental protection actions are in place (see Section 1.5, Environmental Protection Actions Incorporated into the Project, of this IS/MND) to reduce impacts related to air quality, biological resources, and geologic hazards. Additionally, mitigation measures are listed herein to reduce impacts related to biological resources, cultural resources, hazards and hazardous materials, noise and tribal cultural resources. With implementation of the required mitigation measures and adherence to the environmental protection actions, impacts would be less than significant.

- b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (Less than Significant)**

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

As discussed in Section 3.10 Land Use and Planning, the project is consistent with the goals and policies of the Mendocino County General Plan. The project’s impacts would not add appreciably to any existing or foreseeable future significant cumulative impact, such as visual quality, biological resources, cultural resources, traffic impacts, or air quality degradation. Incremental impacts, if any, would be negligible and undetectable. As reported throughout the document, any applicable cumulative impacts to which this project would contribute would be mitigated to a less-than-significant level. Incremental impacts, if any, would be very small, and the cumulative impact would be less than significant.

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

As discussed in the analysis throughout Section 3 of this IS/MND, the project would not have environmental effects that would cause substantial adverse direct or indirect effects on human beings. The impact is less than significant.

3.20 Evaluation of Alternative Trail Alignments

Table 3.20-1 compares the significance of the potential impacts of Alternative 1 and Alternative 2 by resource category. Most resource categories have similar impacts between the two alternative trail alignments. However, under Transportation resources, Alternative 2 would be more impactful than Alternative 1 because transportation impacts would be greater under Alternative 2 since it would cross SR 162 at Biggar Lane from west to east and then back again across SR 162 from east to west at the driveway entrance to Hidden Oaks Casino. Alternative 2 would be less safe for motorists and pedestrians/bicyclists alike than Alternative 1. Biological resources impacts would be greater under Alternative 2 because more wetlands would be impacted than Alternative 1. Cultural resources impacts would be greater under Alternative 1 because there are more cultural resources sites on the west side of SR 162 than under Alternative 2.

Table 3.20-1 Comparison of Trail Alignment Alternatives by Resource Category

Resource Category	Alternative 1	Alternative 2
Aesthetics	=	=
Agricultural Resources	=	=
Air Quality	=	=
Biological Resources		+
Cultural Resources	+	
Geology and Soils	=	=
Greenhouse Gas Emissions	=	=
Hazards and Hazardous Materials	=	=
Hydrology and Water Quality	=	=
Land Use and Planning	=	=
Mineral and Energy Resources	=	=
Noise	=	=
Population and Housing	=	=
Public Services	=	=
Recreation	=	=
Transportation/Traffic		+
Tribal Cultural Resources	=	=
Utilities and Service Systems	=	=

Notes: “+” indicates an impact that is greater (i.e., more substantial) than the other alternative
 “=” indicates an impact that is equal or similar for both alternatives

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5. Report Preparers

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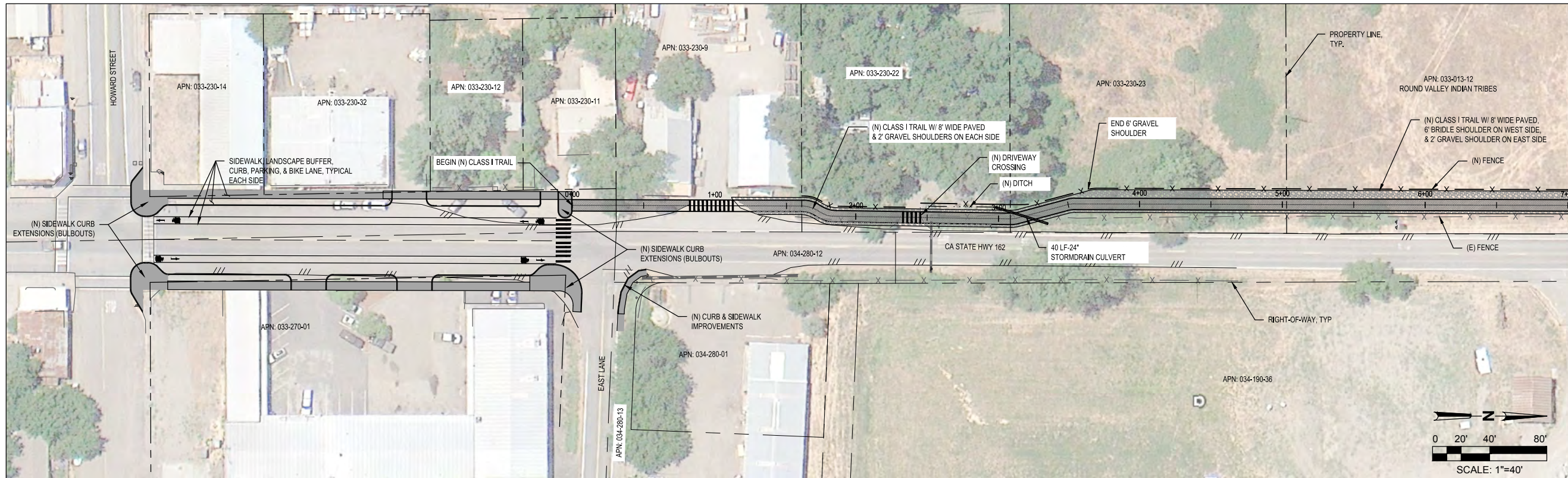
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Appendices

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Appendix A – Preliminary Design Figures

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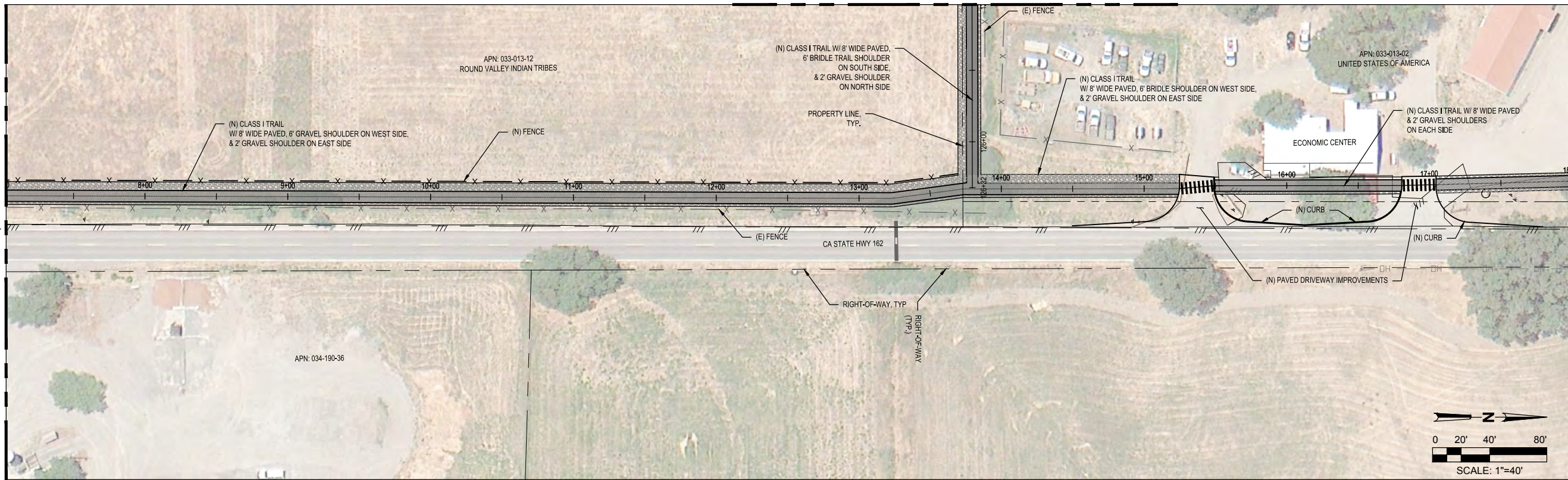
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	(N) CLASS 1 TRAIL
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	(N) SIGN
	(N) FENCE
	(E) FENCE
	(E) EDGE OF PAVEMENT
	(E) DITCH
	(N) DITCH

SURVEY NOTES

TOPOGRAPHIC SURVEY, RIGHT-OF-WAY, PROPERTY LINES, OWNERSHIP AND EXISTING FEATURES BY RAU & ASSOCIATES. SEE SURVEY DATED MARCH 2013 FOR DETAILS NOT SHOWN HERE.

MATCH LINE STA 7+00, SEE PANEL BELOW

MATCH LINE STA 127+00



MATCH LINE STA 18+00

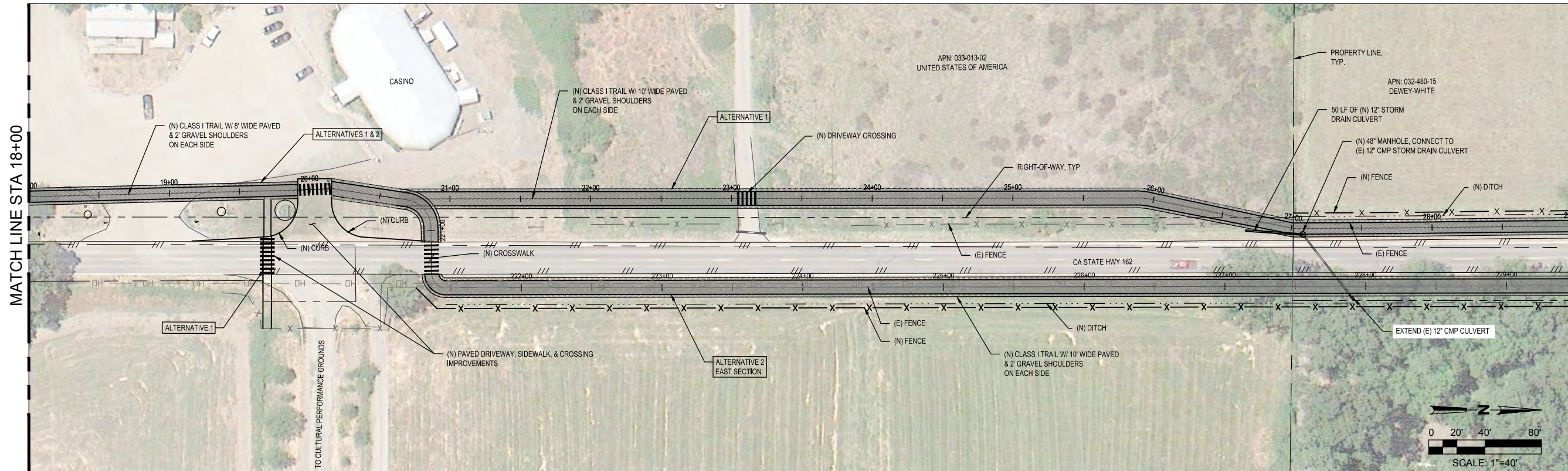
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MENDOCINO COUNCIL OF GOVERNMENTS
 COVELO SR162 CORRIDOR
 MULTIPURPOSE TRAIL PHASES I & II
 PRELIMINARY TRAIL DESIGN

Project No. 11110706
 Report No.
 Date OCT 2017

FIGURE A.1

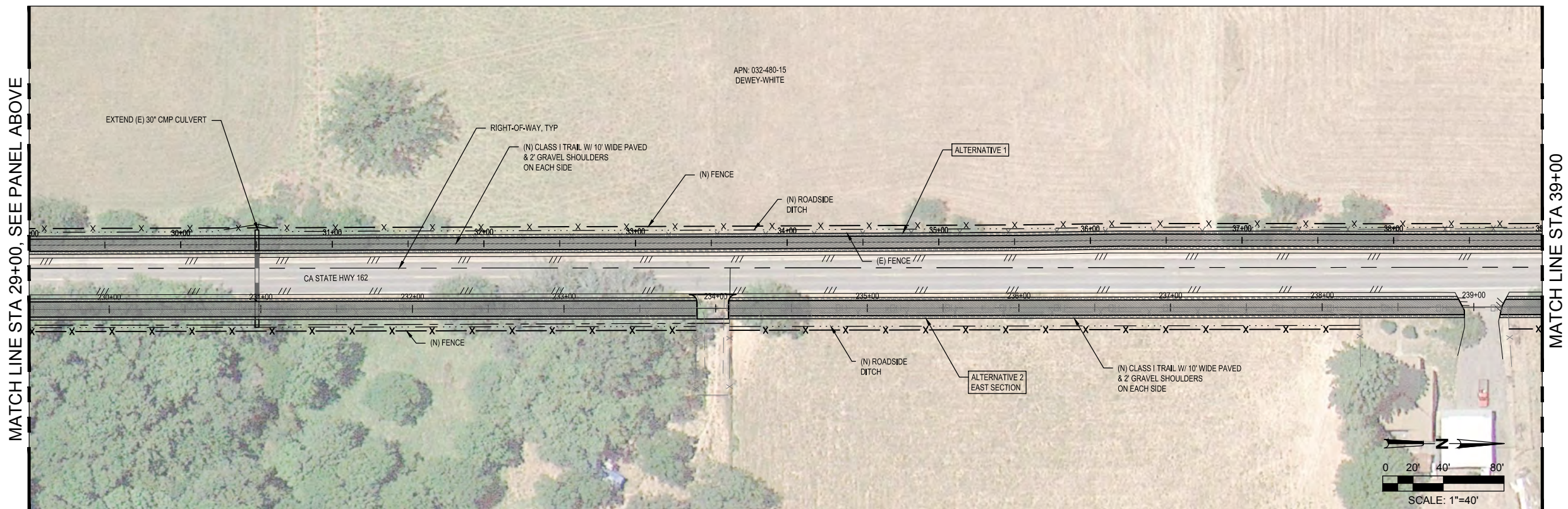


LEGEND

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	(N) CLASS I TRAIL
	(N) HIGH VISIBILITY CROSSING
	(N) SIGN
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	(E) FENCE
	(E) EDGE OF PAVEMENT
	(E) DITCH
	(N) DITCH

SURVEY NOTES

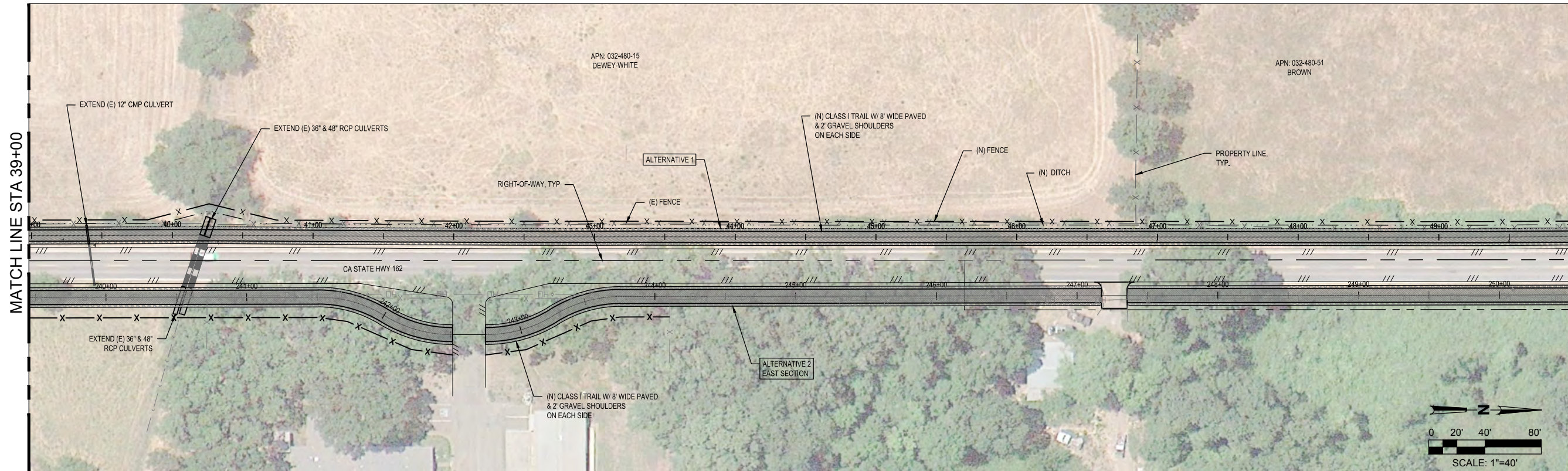
TOPOGRAPHIC SURVEY, RIGHT-OF-WAY, PROPERTY LINES, OWNERSHIP AND EXISTING FEATURES BY RAU & ASSOCIATES. SEE SURVEY DATED MARCH 2013 FOR DETAILS NOT SHOWN HERE.



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FIGURE A.2

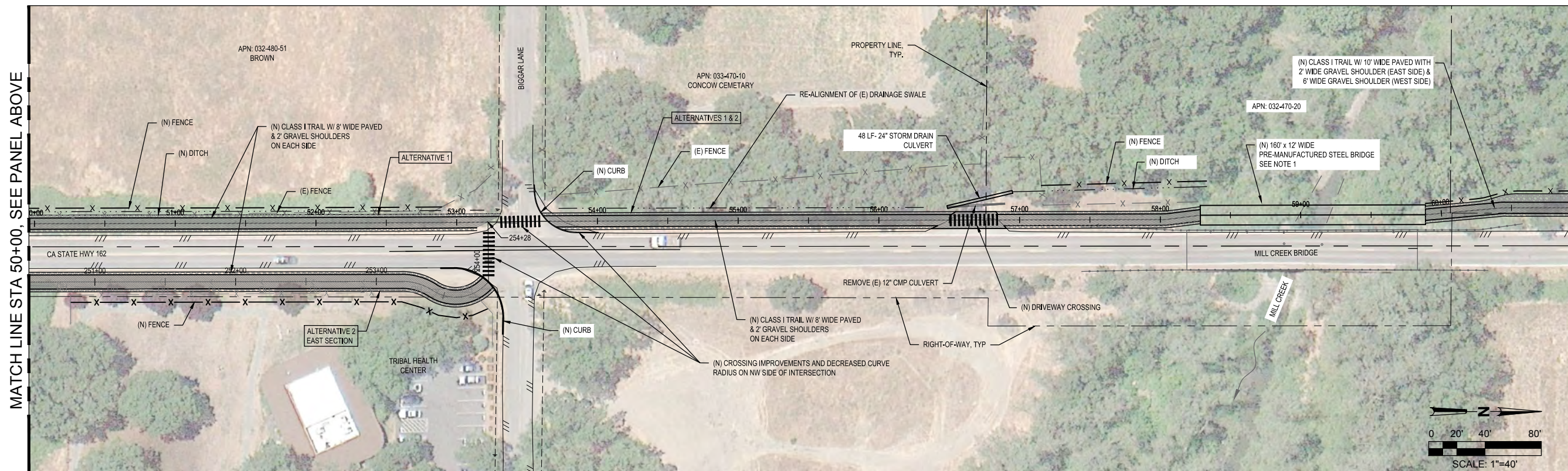


LEGEND

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	(N) CLASS II BIKE LANE
	(N) CLASS 1 TRAIL
	(N) HIGH VISIBILITY CROSSING
	(N) SIGN
	(N) FENCE
	(E) FENCE
	(E) EDGE OF PAVEMENT
	(E) DITCH
	(N) DITCH

SURVEY NOTES

TOPOGRAPHIC SURVEY, RIGHT-OF-WAY, PROPERTY LINES, OWNERSHIP AND EXISTING FEATURES BY RAU & ASSOCIATES. SEE SURVEY DATED MARCH 2013 FOR DETAILS NOT SHOWN HERE.



LEGEND

	(N) CURB
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	(N) CLASS II BIKE LANE
	(N) CLASS 1 TRAIL
	(N) HIGH VISIBILITY CROSSING
	(N) SIGN
	(N) FENCE
	(E) FENCE
	(E) EDGE OF PAVEMENT
	(E) DITCH
	(N) DITCH

SURVEY NOTES

TOPOGRAPHIC SURVEY, RIGHT-OF-WAY, PROPERTY LINES, OWNERSHIP AND EXISTING FEATURES BY RAU & ASSOCIATES. SEE SURVEY DATED MARCH 2013 FOR DETAILS NOT SHOWN HERE.

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MATCH LINE STA 61+00

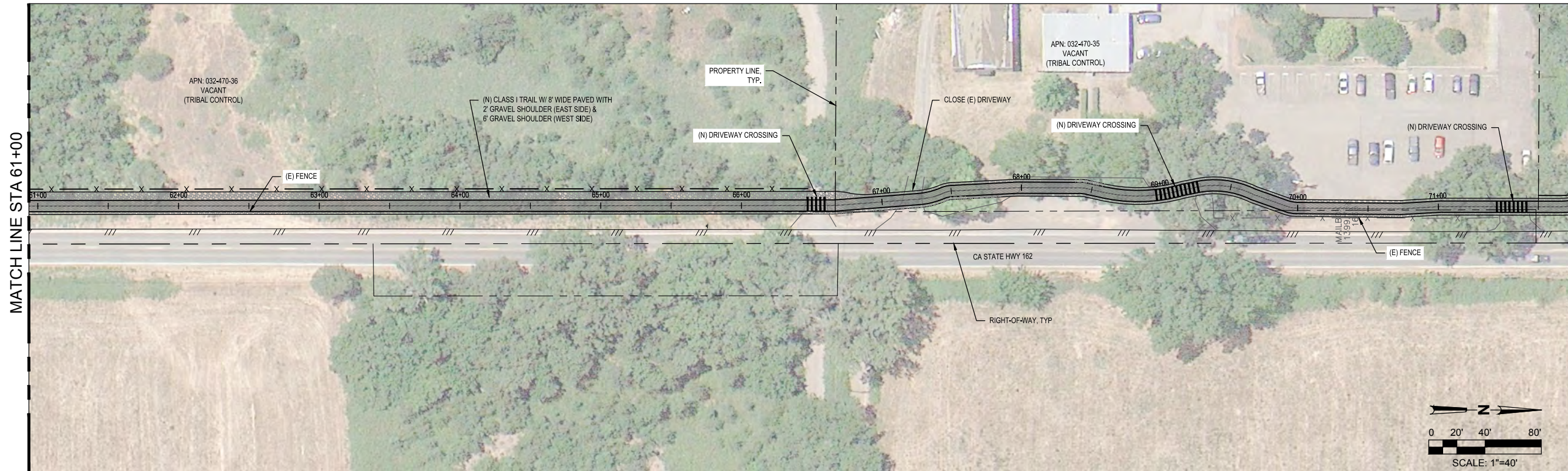


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MULTIPURPOSE TRAIL PHASES I & II
PRELIMINARY TRAIL DESIGN

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FIGURE A.3

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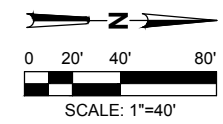
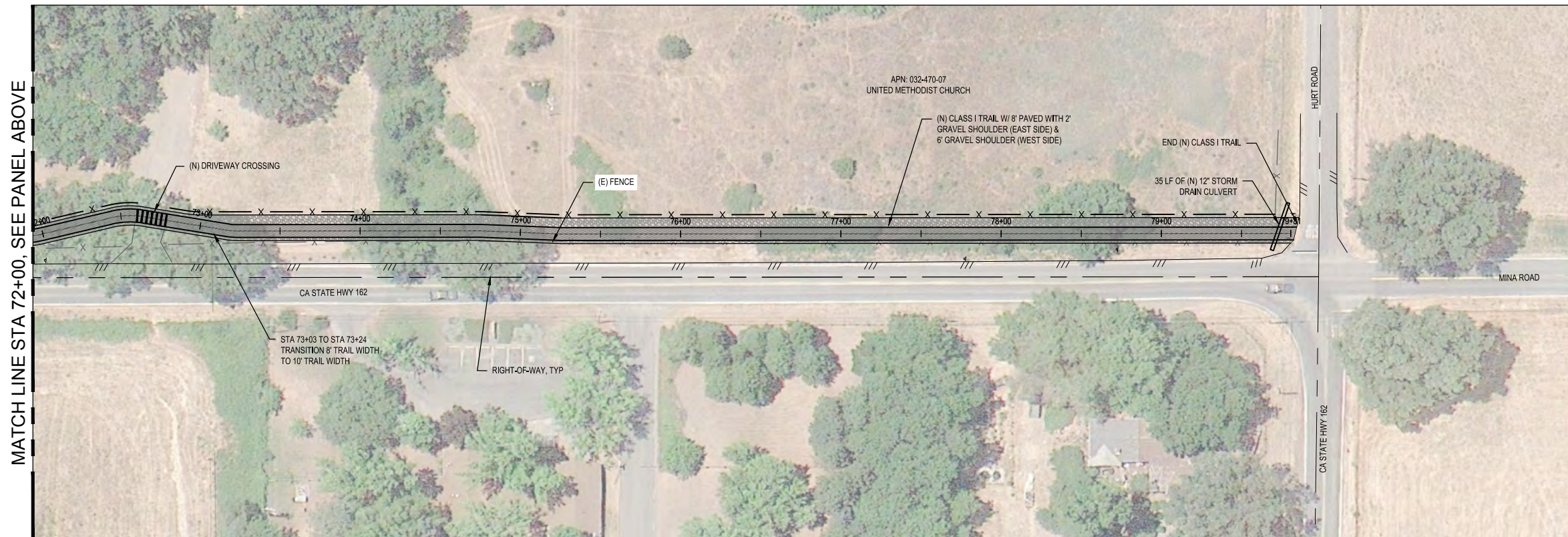


LEGEND

	(N) CURB
	(N) SIDEWALK/ CONCRETE
	(N) CLASS II BIKE LANE
	(N) CLASS 1 TRAIL
	(N) HIGH VISIBILITY CROSSING
	(N) SIGN
	(N) FENCE
	(E) FENCE
	(E) EDGE OF PAVEMENT
	(E) DITCH
	(N) DITCH

SURVEY NOTES

TOPOGRAPHIC SURVEY, RIGHT-OF-WAY, PROPERTY LINES, OWNERSHIP AND EXISTING FEATURES BY RAU & ASSOCIATES. SEE SURVEY DATED MARCH 2013 FOR DETAILS NOT SHOWN HERE.



MATCH LINE STA 72+00, SEE PANEL ABOVE

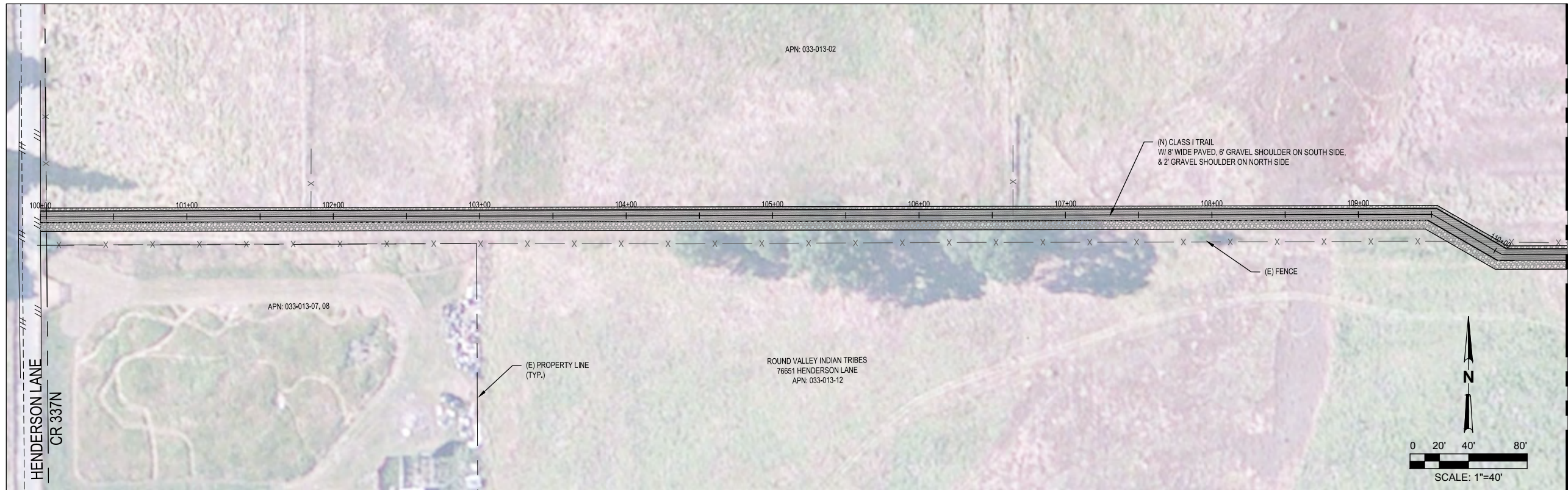
MATCH LINE STA 72+00, SEE PANEL BELOW



MENDOCINO COUNCIL OF GOVERNMENTS
 COVELO SR162 CORRIDOR
 MULTIPURPOSE TRAIL PHASES I & II
 PRELIMINARY TRAIL DESIGN

Project No. 11110706
 Report No.
 Date OCT 2017

FIGURE A.4

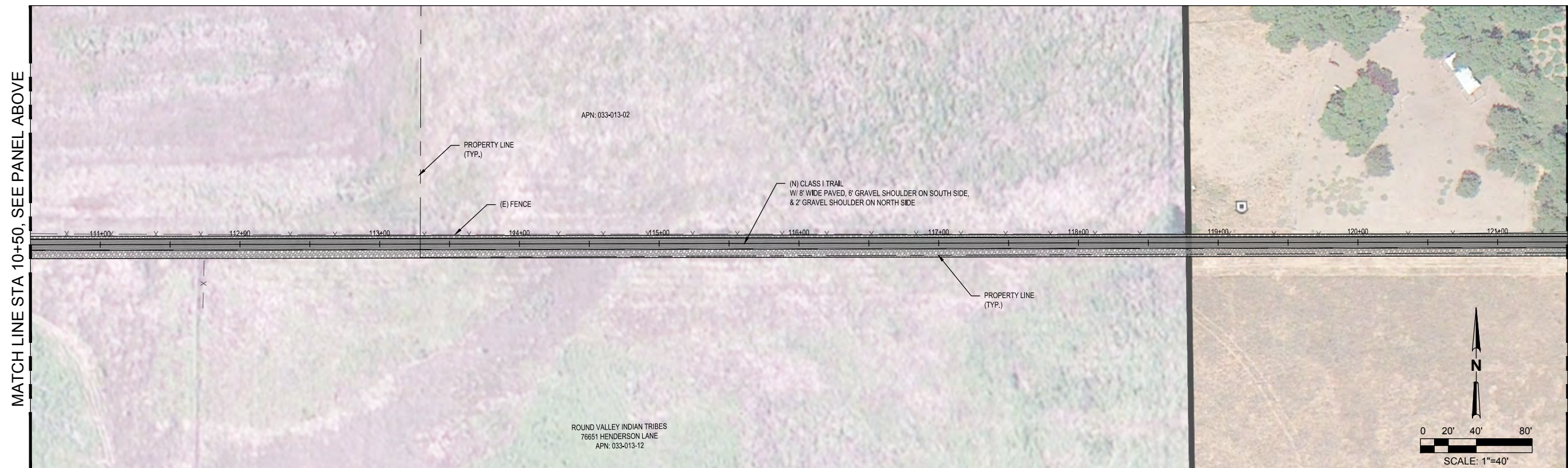


LEGEND	
	(N) CURB
	(N) SIDEWALK/ CONCRETE
	(N) CLASS II BIKE LANE
	(N) CLASS I TRAIL
	(N) HIGH VISIBILITY CROSSING
	(N) SIGN
	(N) FENCE
	(E) FENCE
	(E) EDGE OF PAVEMENT
	(E) DITCH
	(N) DITCH

SURVEY NOTES

TOPOGRAPHIC SURVEY, RIGHT-OF-WAY, PROPERTY LINES, OWNERSHIP AND EXISTING FEATURES BY RAU & ASSOCIATES. SEE SURVEY DATED MARCH 2013 FOR DETAILS NOT SHOWN HERE.

MATCH LINE STA 10+50, SEE PANEL BELOW



MATCH LINE STA 10+50, SEE PANEL ABOVE

MATCH LINE STA 21+50

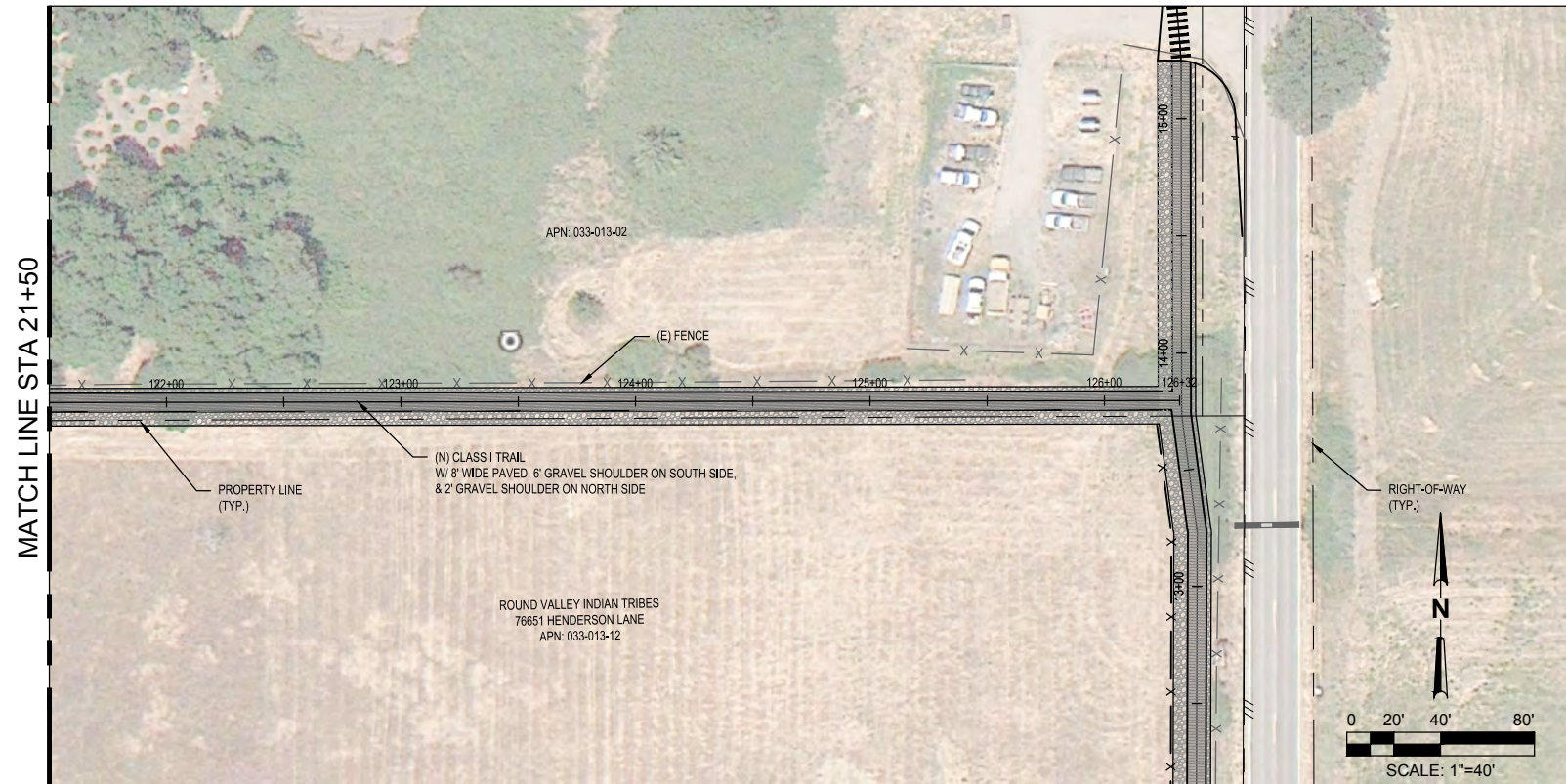


MENDOCINO COUNCIL OF GOVERNMENTS
 COVELO SR162 CORRIDOR
 MULTIPURPOSE TRAIL PHASES I & II
 PRELIMINARY TRAIL DESIGN

Project No. 11110706
 Report No. OCT 2017

FIGURE A.5

Filename: \\ghdnet\ghd\US\Eureka\Projects\111\11110706 MCOG-Covelo SR 162 Corridor Multi Trail\06-CAD\Figures\MND\11110706-PRELIMINARY-DESIGN.dwg
 Plot Date: 5 October 2017 - 9:41 AM



LEGEND	
	(N) CURB
	(N) SIDEWALK/ CONCRETE
	(N) CLASS II BIKE LANE
	(N) CLASS 1 TRAIL
	(N) HIGH VISIBILITY CROSSING
	(N) SIGN
	(N) FENCE
	(E) FENCE
	(E) EDGE OF PAVEMENT
	(E) DITCH
	(N) DITCH

SURVEY NOTES

TOPOGRAPHIC SURVEY, RIGHT-OF-WAY, PROPERTY LINES, OWNERSHIP AND EXISTING FEATURES BY RAU & ASSOCIATES. SEE SURVEY DATED MARCH 2013 FOR DETAILS NOT SHOWN HERE.



MENDOCINO COUNCIL OF GOVERNMENTS
COVELO SR162 CORRIDOR
MULTIPURPOSE TRAIL PHASES I & II
PRELIMINARY TRAIL DESIGN

Project No. 11110706
Report No.
Date OCT 2017

FIGURE A.6

Appendix B – CalEEMod Emissions

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Covelo Trail - Mendocino-Rural Inland North County, Annual

Covelo Trail
Mendocino-Rural Inland North County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	2.50	Acre	28.98	108,900.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	86
Climate Zone	1			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Land Use - 2.05 mile long (10,824') x 10' wide pavement = 2.48 acres pavement. Total project area (shoulders, staging, etc.) of 28.98 acres

Grading - 1,000 cy export, 1,000 cy import

Construction Off-road Equipment Mitigation - Environmental Protection Action 2

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	16
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	10
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LotAcreage	2.50	28.98
tblProjectCharacteristics	OperationalYear	2018	2022

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	2/3/2020	2/28/2020	5	20	Clearing and Grubbing
2	Grading	Grading	2/29/2020	5/1/2020	5	45	
3	Paving	Paving	5/2/2020	6/19/2020	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 28.98

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Water Unpaved Roads
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0408	0.4242	0.2151	3.8000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	33.4307	33.4307	0.0108	0.0000	33.7010
Total	0.0408	0.4242	0.2151	3.8000e-004	0.1807	0.0220	0.2027	0.0993	0.0202	0.1195	0.0000	33.4307	33.4307	0.0108	0.0000	33.7010

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.8000e-004	0.0188	3.3800e-003	5.0000e-005	0.9848	9.0000e-005	0.9849	0.0984	8.0000e-005	0.0985	0.0000	4.7640	4.7640	1.4000e-004	0.0000	4.7676
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	1.3100e-003	0.0111	1.0000e-005	1.5314	1.0000e-005	1.5314	0.1529	1.0000e-005	0.1529	0.0000	1.2751	1.2751	9.0000e-005	0.0000	1.2775
Total	2.0800e-003	0.0201	0.0145	6.0000e-005	2.5162	1.0000e-004	2.5163	0.2513	9.0000e-005	0.2514	0.0000	6.0391	6.0391	2.3000e-004	0.0000	6.0450

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0670	0.0000	0.0670	0.0387	0.0000	0.0387	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0408	0.4242	0.2151	3.8000e-004		0.0220	0.0220		0.0202	0.0202	0.0000	33.4306	33.4306	0.0108	0.0000	33.7009
Total	0.0408	0.4242	0.2151	3.8000e-004	0.0670	0.0220	0.0889	0.0387	0.0202	0.0590	0.0000	33.4306	33.4306	0.0108	0.0000	33.7009

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.8000e-004	0.0188	3.3800e-003	5.0000e-005	0.2609	9.0000e-005	0.2610	0.0260	8.0000e-005	0.0261	0.0000	4.7640	4.7640	1.4000e-004	0.0000	4.7676
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-003	1.3100e-003	0.0111	1.0000e-005	0.4055	1.0000e-005	0.4055	0.0403	1.0000e-005	0.0403	0.0000	1.2751	1.2751	9.0000e-005	0.0000	1.2775
Total	2.0800e-003	0.0201	0.0145	6.0000e-005	0.6664	1.0000e-004	0.6665	0.0663	9.0000e-005	0.0664	0.0000	6.0391	6.0391	2.3000e-004	0.0000	6.0450

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1001	1.1294	0.7191	1.4000e-003		0.0489	0.0489		0.0450	0.0450	0.0000	122.5897	122.5897	0.0397	0.0000	123.5809
Total	0.1001	1.1294	0.7191	1.4000e-003	0.1952	0.0489	0.2441	0.0809	0.0450	0.1259	0.0000	122.5897	122.5897	0.0397	0.0000	123.5809

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.8000e-004	0.0188	3.3800e-003	5.0000e-005	0.9848	9.0000e-005	0.9849	0.0984	8.0000e-005	0.0985	0.0000	4.7640	4.7640	1.4000e-004	0.0000	4.7676
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7500e-003	3.2600e-003	0.0277	4.0000e-005	3.8284	4.0000e-005	3.8284	0.3823	3.0000e-005	0.3823	0.0000	3.1877	3.1877	2.4000e-004	0.0000	3.1936
Total	4.3300e-003	0.0221	0.0311	9.0000e-005	4.8132	1.3000e-004	4.8133	0.4807	1.1000e-004	0.4808	0.0000	7.9517	7.9517	3.8000e-004	0.0000	7.9612

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0723	0.0000	0.0723	0.0316	0.0000	0.0316	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1001	1.1294	0.7191	1.4000e-003		0.0489	0.0489		0.0450	0.0450	0.0000	122.5895	122.5895	0.0397	0.0000	123.5807
Total	0.1001	1.1294	0.7191	1.4000e-003	0.0723	0.0489	0.1212	0.0316	0.0450	0.0766	0.0000	122.5895	122.5895	0.0397	0.0000	123.5807

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.8000e-004	0.0188	3.3800e-003	5.0000e-005	0.2609	9.0000e-005	0.2610	0.0260	8.0000e-005	0.0261	0.0000	4.7640	4.7640	1.4000e-004	0.0000	4.7676
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7500e-003	3.2600e-003	0.0277	4.0000e-005	1.0138	4.0000e-005	1.0138	0.1008	3.0000e-005	0.1009	0.0000	3.1877	3.1877	2.4000e-004	0.0000	3.1936
Total	4.3300e-003	0.0221	0.0311	9.0000e-005	1.2746	1.3000e-004	1.2748	0.1268	1.1000e-004	0.1269	0.0000	7.9517	7.9517	3.8000e-004	0.0000	7.9612

3.4 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0237	0.2462	0.2564	4.0000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	35.0494	35.0494	0.0113	0.0000	35.3328
Paving	0.0380					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0617	0.2462	0.2564	4.0000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	35.0494	35.0494	0.0113	0.0000	35.3328

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1900e-003	1.9000e-003	0.0162	2.0000e-005	2.2332	2.0000e-005	2.2333	0.2230	2.0000e-005	0.2230	0.0000	1.8595	1.8595	1.4000e-004	0.0000	1.8630
Total	2.1900e-003	1.9000e-003	0.0162	2.0000e-005	2.2332	2.0000e-005	2.2333	0.2230	2.0000e-005	0.2230	0.0000	1.8595	1.8595	1.4000e-004	0.0000	1.8630

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0237	0.2462	0.2564	4.0000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	35.0493	35.0493	0.0113	0.0000	35.3327
Paving	0.0380					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0617	0.2462	0.2564	4.0000e-004		0.0132	0.0132		0.0121	0.0121	0.0000	35.0493	35.0493	0.0113	0.0000	35.3327

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1900e-003	1.9000e-003	0.0162	2.0000e-005	0.5914	2.0000e-005	0.5914	0.0588	2.0000e-005	0.0588	0.0000	1.8595	1.8595	1.4000e-004	0.0000	1.8630
Total	2.1900e-003	1.9000e-003	0.0162	2.0000e-005	0.5914	2.0000e-005	0.5914	0.0588	2.0000e-005	0.0588	0.0000	1.8595	1.8595	1.4000e-004	0.0000	1.8630

Appendix C Appendix C – Biological Resources Information

- C-1 Botanical Technical Memorandum (GHD 2017)**
- C-2 Table of Database Results and Potential for Species to Occur at Site**
- C-3 Wetland Delineation Figures**

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Memorandum

September 12, 2017

To	James Sookne, Mendocino Council of Governments 367 North State Street, Suite 206, Ukiah, CA 95482		
Copy to	Steve McHaney (Project Manager), GHD		
From	Lia Webb (Ecologist), GHD	Tel	707.443.8326
Subject	Botanical Technical Memorandum for the Covelo SR 162 Corridor Multi-Purpose Trail Project, Covelo, CA	Job no.	111-10706.30

1 Introduction

On behalf of the Mendocino Council of Governments (MCOG), GHD conducted botanical surveys and habitat evaluation in support of the Covelo State Route (SR) 162 Corridor Multi-Purpose Trail Project (project). This Botanical Technical Memorandum reports the results of the field efforts conducted in preparation for the above referenced project. The area of investigation is in Covelo, Mendocino County, California (Figure 1, Attachment 1).

The evaluation herein consists of review of potential federal and State sensitive-listed plant species, which may occur at the project site, field review for sensitive vegetation communities, and a seasonally appropriate survey of the site for special status plant species (Alternative 1). On June 12, 2017, a seasonally appropriate special status plant survey and vegetation community mapping was conducted within the Alternative 1 Project Study Boundary (PSB) (Figure 2, Attachment 1). Federal or State-listed plant species were not observed as being present at the site.

On September 7, 2017, GHD field staff returned to the site for vegetation community mapping of properties along the east side of SR 162, which make up a portion of the proposed trail for Alternative 2. The proposed trail alternatives are described in detail below. With the exception of the northern most staging area, no access permission had been granted for properties on the east side of SR 162 and vegetation community mapping was performed from the road margin. The site visit on September 7th was also outside of the floristically appropriate survey window for species with potential to occur within the project area. Thus, the results of the botanical survey are not complete for properties on the eastern side of SR 162 comprising a section of Alternative 2. The method and results of these efforts are presented herein.

1.1 Location

The project site is located in Round Valley in Covelo, Mendocino County, California. Covelo is approximately 14 miles northeast of Laytonville and can be accessed from SR 162 off Highway 101 (Figure 1). The SR 162 corridor is the primary north-south route between the town of Covelo and the Round Valley Indian Reservation's administrative services area, which includes a health center and Tribal offices. SR 162 is the central collector through the community, intersecting County roads. SR 162 is a 22 – 26 foot wide, two-lane, conventional highway with narrow or no shoulders. The linear project site is aligned generally along Highway 162 and along California Department of Transportation (Caltrans) Right of Way, although not entirely within it, as well as additional areas associated with the Alternative 2 eastern alignment and staging areas that deviate from SR 162 margins.

Two Alternative routes are under consideration for the proposed trail. Phase I of Alternative 1 would run parallel to and on the west side of SR 162 from Howard Street to Biggar Lane (1.05 miles) with an east-west component connecting to Henderson Lane (0.5 miles). Phase II of Alternative 1 would run parallel to SR 162 from Biggar Lane to Hurt Road (0.5 miles). Alternative 2 would run parallel to and on the east side of SR 162 between Biggar Lane and the Hidden Oaks Casino entrance, with the remaining portion of the trail on the west side of SR 162 identical to Alternative 1.

1.2 Purpose

The purpose of this evaluation was to review the potential for State and federal sensitive-listed plant species with the potential to occur in the proposed project area, review the site for sensitive vegetation communities, and conduct seasonally appropriate plant survey(s). The results of this evaluation will be used in support of permitting, environmental documentation, and construction planning.

2 Regulatory Setting

Following is an overview of federal, State, and local jurisdictional agencies that have potential oversight of the project site in relation to environmental resources specific to plants and plant communities. The regulatory setting includes discussion of U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the County of Mendocino jurisdictions, among others. Wetland resources and agency jurisdiction over these resources are discussed under separate cover (GHD 2017).

2.1 Federal Jurisdiction

2.1.1 Federal-Listed Species

Specialstatus plant species under federal jurisdiction include those listed as endangered, threatened, or as candidate species by the USFWS under the U.S. Endangered Species Act (ESA). The USFWS maintains a list of listed species under their jurisdiction and provides this list via an online database for project areas.

2.1.2 Critical Habitat

Critical Habitat is defined by the ESA as a specific geographic area containing features essential for the conservation of an endangered or threatened species. The ESA requires consultation with USFWS by federal lead agencies for activities they carry out, authorize, or fund. Under Section 7 of the ESA, critical habitat should be evaluated if designated for federally listed species in a project Action Area.

2.2 State Jurisdiction

2.2.1 State-Listed Species

Special status plant species under State jurisdiction include those listed as endangered, threatened, or as candidate species by the CDFW under the California Endangered Species Act (CESA). Additionally, prior to the adoption of CESA, nine species were given status as California Fully Protected Species (CFP). Some, but not all, of these species were later listed under the CESA as well. For CEQA purposes, species listed as candidates for listing with the State, should be considered as if they are actually State-listed until the State makes a final ruling on the species (usually one year from date of Candidate status).

Plant species on California Native Plant Society's (CNPS) California Rare Plant Ranking (CRPR) Lists 1A, 1B and 2 are considered eligible for State listing as Endangered or Threatened pursuant to the California Fish and Game Code and CDFW has oversight of these special status plant species as a trustee agency of CEQA. As part of the CEQA process, such species should be considered as they meet the special status definition under Sections 2062 and 2067 of the California Fish and Game Code. CRPR List 3 and 4 plants do not have formal protection under CEQA. CDFW publishes and periodically updates lists of special plants and animals, which include for the most part the above categories.

2.2.2 State Species of Concern

Species designated by the State of California as special status species of concern (SSC) warrant consideration under CEQA.

2.2.3 Sensitive Plant Communities

CDFW provides oversight of habitats (i.e. plant communities) listed as sensitive in CNDDDB, based on global and State rarity ranking according to the list of State-wide natural communities, *Hierarchical List of Natural Communities*, developed by CDFW. The natural communities are broken down to alliance level for vegetation types affiliated with ecological regions of California. The list and alliances coincide with *A Manual of California Vegetation* (Sawyer et al. 2009). According to the CDFW vegetation classification *Hierarchical List of Natural Communities*, habitats are listed as "high priority for inventory" based on global or State rarity rankings. CDFW considers alliances and associations with a S1 to S3 rank to be of special concern as well as highly imperiled (CDFW 2013). The application of ranking for determination of sensitive communities is summarized as follows in Table 1 (NatureServe 2009):

Table 1 NatureServe Conservation Status Ranks

Name	Calculated Status Rank	Status Description
score \leq 1.5	G1, N1, S1	Critically Imperiled
1.5 < score \leq 2.5	G2, N2, S2	Imperiled
2.5 < score \leq 3.5	G3, N3, S3	Vulnerable
3.5 < score \leq 4.5	G4, N4, S4	Apparently Secure

2.3 Local Jurisdiction

The project site is in Mendocino County and as such is governed by the County of Mendocino General Plan.

3 Approach

3.1 Project Study Boundary Approach

Prior to conducting fieldwork, the project scientist worked in coordination with the project engineer and the applicant to develop the limits of the PSB. The PSB is a terminology adopted from definitions and permit procedures promulgated by the U.S. Army Corps of Engineers (USACE). The PSB is designated on a project-specific basis, and as feasible, to take into consideration potential alternate layouts of project, fill/cut slopes, temporary impact areas and/or adjacent areas if feasible, access, new or modified utilities and right of ways, and adjacent areas that may be feasibly included in the study. The PSB may be modified on a project-specific basis according to such issues as private property ownerships, access constraints, and areas excluded from project use.

3.2 Pre-Survey Research Approach

Prior to conducting a Biological Evaluation, database searches were conducted to compile a list of species with State and/or federal jurisdiction and sensitive plant communities with moderate to high likelihood of occurring at the project site. These database searches are further described below. Relevant literature was also reviewed when available, to include but not be limited to sensitive species reports, recovery plans, status reports, published articles, and/or previous regulatory review documents. The Consortium of California Herbaria database was consulted for site-specific species cross references of rare plant occurrences documented in the project vicinity. Topographic maps and aerial photography maps were consulted prior to and/or during the survey to determine potential habitats for target sensitive plant species occurrence. When available, Geographic Information System (GIS) data was overlaid with the PSB.

3.2.1 State-Listed Species Search

The CDFW and the CNPS recommend an assessment area for a project be a minimum of nine USGS quadrangles with the PSB located in the central quad. Prior to field surveys, *California Natural Diversity Database* (CNDDDB) [CDFW 2017] and the CNPS *Inventory of Rare and Endangered Vascular Plants* (CNPS 2017) was reviewed for the appropriate quadrangles for the larger assessment area to compile a scoping list of CRPR plant species, and sensitive plant communities with recorded occurrences in the project vicinity (Table 3, Attachment 2). The scoping list includes special status plants that occur in habitat similar to the project area and/or with documented occurrences in the project vicinity. The scoping list may include, when applicable, other taxa that could occur in the project area where habitat is suitable if the project is within or near the known range of a species, particularly for mobile species that may not appear on the nine quad database search. The CNDDDB database and CNPS Inventory were also queried for CRPR List 3 and 4 plant species known to occur within the county for informational purposes while conducting field surveys, although those species are not presented on the scoping list herein unless observed during the botanical surveys.

3.2.2 Federal-Listed Species Search

Prior to field surveys, Information for Planning and Consultation (IPaC) lists maintained by USFWS were evaluated and added to the scoping list of CRPR plant species and sensitive plant communities with recorded occurrences in the project vicinity (Table 3, Attachment 2). Critical habitat for federally listed species was also evaluated as to presence in the PSB and adjacent areas.

3.3 Survey Approach

Survey(s) to determine the presence of special status plant species (listed as rare, threatened, endangered, or candidate for rare, threatened, or endangered species listing under the State or Federal Endangered Species Acts, CNPS, or species of local importance) are typically conducted in the appropriate blooming or active period for each species, unless a determination can be made that a plant species can be identified in vegetative state during surveys outside of the bloom period. Reference sites of known locations of target sensitive plants can be visited prior to survey to confirm adequate survey window and species search images.

The plant survey was floristic in nature following *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* by the California Natural Resource Agency (CDFW 2009) and *General Rare Plant Survey Guidelines* by the Endangered Species Recovery Program (Cypher 2002). An intuitively controlled survey was conducted that sampled and identified potential habitat(s). Plants were identified to the lowest taxonomic level (genus or species) necessary for rare plant identification. Nomenclature follows *The Jepson Manual, Second Edition* (Baldwin et al 2012). Species surveys were conducted by walking the site focusing on potential habitats for target species and recording extent, approximate number, and percent cover of special status plant species if observed

Sensitive plant species locations, if observed, were recorded with a Trimble GPS with sub-meter accuracy when not under a tree canopy. In locations under tree canopies and with limited satellite signal, special status plant locations were recorded on a field map or if possible with a Tablet PC GPS

(not sub-meter accuracy). The location of individual plants was not recorded, rather a polygon was drawn to encompass the area of species presence and an estimate of individuals (to the nearest 100) present and approximate percent cover (using standard cover classes of 1-5%, 5-25%, 25-50%, 50-75%, and greater than 75%) at the time of survey was recorded.

4 Methods

4.1 Project Study Boundary

For the purposes of this study and field survey, the 2017 PSB includes (as shown on Figure 2):

- A. 20 feet width to allow for the trail footprint plus additional area on each side for potential fill slopes and temporary impact area for construction access.
- B. Several parcels that are being considered, at least in part, for staging areas.
- C. The 2017 habitat mapping efforts PSB included Alternative 1 (west) as well as Alternative 2 eastern route being considered under CEQA (Figure 2).
- D. The initial 2017 seasonally-appropriate botanical surveys were conducted within the Alternative 1 PSB alignment only, and did not include portions of Alternative 2 that are outside of the Alternative 1 alignment being considered under CEQA (Figure 2) as that area had not been designated at the time of the initial 2017 plant survey. A botanical survey could not be conducted for the Alternative 2 PSB in areas not coincident with Alternative 1 PSB, as the second survey date was outside of the bloom period for target sensitive plants surveys and access permission had not been secured for properties on the east side of SR 162.

4.2 Pre-Project Research Methods

The assessment area was defined as the USGS 7.5 minute quadrangles in which the project is located (Covelo East and Covelo West) and the 10 surrounding quads (Bluenose Ridge, Updegraff Ridge, Iron Peak, Laytonville, Dos Rios, Jamison Ridge, Leech Lake Mountain, Mina, Newhouse Ridge, and Thatcher Ridge).

4.3 Field Survey Methodology

Based on the pre-field plant scoping list (Table 3, Attachment 2) and evaluation of plants with moderate to high likelihood of occurrence in the project vicinity, it was determined that a minimum of one seasonally-appropriate focused botanical survey should be conducted within the PSB-west for Alternative 1 in the early summer to capture bloom period of target plant species. Species not within bloom at time of survey would likely be visible in vegetative state, and this assumption was further assessed at time of survey. Reference sites were visited as indicated by CNDDDB as having potential presence of target species adjacent to the project alignment, yet target species were not apparent in reference areas, possibly from habitat degradation or succession. The survey of PSB-west (Alternative 1) was therefore conducted on June 12, 2017. The Alternative 2 alignment was later added to the

project. Properties on the east side of SR 162 comprising sections of Alternative 2 where not coincident with Alternative 1 PSB, could not be surveyed for 2017 as the timing (September) was no longer appropriate for floristic surveys (i.e. outside the blooming window for target species), and property access had not been granted.

5 Results

5.1 Plant Survey Results

On June 12, 2017, a botanical field survey of the Alternative 1 route (PSB-west) was conducted by GHD Ecologist Lia Webb. This area (PSB-west) was surveyed to identify presence and location of special status plant species, if any. The area was evaluated by walking the proposed alignment and looking for the presence of target species and habitats identified on the scoping list, as well as presence of other incidental sensitive-listed plant species. At the time of the survey of PSB-west, the following one federally endangered species and two State special status species with moderate and high likelihood of occurrence were indicated by CNPS to be in bloom: *Horkelia tenuiloba* (thin-lobed horkelia) [1B.2], *Lupinus milo-bakeri* (Milo Baker's lupine) [ST], and *Trifolium amoenum* (snowy indian clover) [FE, 1B.1]. The following remaining two State special status species on the scoping list with moderate to high likelihood to occur at the site would have likely been visible in vegetative state within the focused field survey area along the linear project corridor: *Limnanthes bakeri* (Baker's meadowfoam) [1B.1] and *Ophioglossum pusillum* (northern adder's-tongue) [2B.2]. No federal or State sensitive-listed plant species were observed. A total of 5.5 field person hours were spent surveying the Alternative 1 PSB.

5.2 Sensitive Plant Communities Results

For the assessment area, plant communities/vegetation alliances observed at the site that are included in CNDDDB are presented in Table 2. Per CDFW, the habitats would be considered sensitive for those with S1 through S3 ranking.

Table 2 CNDDDB Plant Communities Observed in the PSB

Name	State Rank
Valley oak woodland (<i>Quercus lobata</i> Alliance)	S2.1
Oregon white oak woodland (<i>Quercus garryana</i> Alliance)	S3.3

Nomenclature and status per CNDDDB (CDFW 2017)

Oak woodland communities were mapped within Alternative 1 and were not further distinguished at the alliance level and appeared to be a mix of Valley oak (*Quercus lobata*) and Oregon white oak (*Quercus garryana*) (Figure 2). Oak woodlands mapped along the eastern side of SR 162 within Alternative 2 were determined to be valley oak woodland (*Quercus lobata*) Alliance fitting with the description of this alliance in *A Manual of California Vegetation* (Sawyer et al. 2009). The valley oak

woodlands were composed predominately of valley oaks with > 50% relative cover in the tree canopy, with occasional Oregon white oak trees or small stands of Oregon white oak trees.

Individual valley oak trees (S2.1 at the community level, no special status per CDFW for individual trees) and Oregon white oak trees (S3.3 at the community level, no special status per CDFW for individual trees) were observed at the site (CDFG 2010). Individual oak trees and oak woodlands were mapped at the drip line (Figure 2) for project planning, conservation efforts, and calculating potential impacts to S1 through S3 plant communities considered sensitive by CDFW.

The Mendocino County General Plan does not have specific protection measures for oak woodlands or oak species, and as such, protection of these areas will be governed by above described State jurisdiction and requirements.

5.3 Federal Critical Habitat

The USFWS database search (USFWS 2017) documented that there is no designated critical habitat for plant species within the project area.

6 Potential Effects

Because federal or State listed plant species were not observed during the seasonally appropriate plant survey of 2017 within Alternative 1 PSB, the potential project is anticipated to have no effect on State or federal listed plant species. The Alternative 2 eastern alignment (where it deviates from the Alternative 1 alignment) was not surveyed for target sensitive plant species and additional seasonally appropriate survey of this area will be necessary prior to construction. The project should adhere to similar (yet not be limited to) conservation measures as provided in the recommendations section below to minimize significant impacts to State or federal listed plant species and special status plants or plant communities. Potential impacts to special status plants and special status plant communities will be assessed further under CEQA documentation.

7 Recommendations

The following are preliminary and conceptual conservation and/or protection actions that are recommended to assist in reduction of potential environmental impacts of the project. These recommendations are based on observations of existing conditions observed during 2017 field evaluations within the designated 2017 PSB, along with the project description as described at the time of field survey. The following may need to be adjusted once project design is developed further and CEQA documentation proceeds.

- Avoidance and minimization should be employed for the project for sensitive plant species.
- Impacts to sensitive plant species are not anticipated within the 2017 Alternative 1 PSB. If the Alternative 2 alignment is being considered, pre-project plant surveys shall be conducted in

2018 or at a minimum, one year prior to the planned construction window so as to allow adequate time for seed collection for plant propagation and/or plant translocation.

- If sensitive plant species are documented within the project footprint or temporary construction impact area for Alternative 2, and if Alternative 2 is selected, a species-specific Sensitive Species Mitigation Plan (SSMP) will be developed in the year prior to construction and submitted to CDFW for consideration. The plan will include species-specific measures for plant relocation, seed collection, and/or nursery plant propagation and replanting. The SSMP will designate an appropriate site for mitigation to occur for sensitive plant impacts, either along the linear project corridor or at a nearby parcel. The SSMP will document suitable conditions for species-specific plant requirements at the mitigation site. The SSMP will provide a monitoring approach for no net loss of plant species.
- The results of the plant survey are valid for two to three years. Surveys should be updated or preconstruction surveys utilized, if the project is not implemented prior to survey results expiring. Given the generally low quality habitat for sensitive-listed plant species in the project footprint and temporary impact areas, preconstruction surveys are not proposed within the Alternative 1 PSB if construction is conducted prior to expiration of the original botanical survey conducted in June 2017.
- Limits of disturbance should be constrained to within the PSB designated for this study herein, unless further analysis of other areas is conducted.
- Orange construction avoidance fence will be placed at a minimum of 10 feet beyond the drip line of oak trees adjacent to the project alignment, staging, or access areas. Construction staging and access will avoid impacts to oak trees.
- Impacts to oak trees from construction and long-term operation will be calculated at the drip line (lumps both direct impacts to trunks and potential indirect impacts within the drip line). An arborist or biologist will conduct a tree survey prior to construction within areas where direct or indirect impacts to oaks are anticipated. The arborist or biologist will document tree species, diameter at breast height (dbh) of all oaks with canopy or trunks within the impact area. Project mitigation for direct and indirect impacts will be calculated as follows:
 - <12 inch dbh will provide minimum of 1:1 mitigation ratio
 - 12-18 inch dbh will provide minimum of 1.5:1 mitigation ratio
 - >18 inch dbh will provide minimum of 2:1 mitigation ratio

The replacement species composition and exact number of trees to be planted at the mitigation area shall be subject to approval of CDFW. Although the project site has sufficient area to accommodate the required tree mitigation, alternative sites may be considered including local parks or schools or installation of trees on adjacent properties for screening purposes to the satisfaction of CDFW, Caltrans, project Applicant, and relevant property owners.

A Habitat Mitigation Plan (HMP) will be prepared that provides description of the mitigation site, site selection criteria, and appropriate conditions of oak growth, plant propagation methods, acorn collection if any, implementation, maintenance, and monitoring, to be submitted to CDFW for consideration. The HMP will describe whether overplanting is recommended to allow for mitigation ratios to be achieved.

- The following tree protection measures will also be included in the project in order to protect trees to be retained during construction:

Pre-construction treatments:

1. The applicant shall retain a consulting scientist (arborist or biologist). The construction superintendent shall meet with the consulting scientist before beginning work to discuss work procedures and tree protection.
2. Fence all trees to be retained by a minimum of 10 feet beyond the drip line to completely enclose the Tree Protection Zones prior to staging, grubbing, or grading. Fences shall be orange construction avoidance fence staked at regular intervals of approximately 10 feet on center, or 6 ft. chain link or equivalent as approved by consulting arborist or biologist. Fences are to remain until all grading and construction is completed.
3. If pruning of trees to be preserved is necessary to clean the crown and to provide clearance, all such activity shall be completed or supervised by an arborist or qualified biologist and follow the *Best Management Practices for Pruning of the International Society of Arboriculture*.

During construction:

1. No grading, construction, demolition or other work shall occur within the Tree Protection Zone. Any modifications must be approved and monitored by the consulting arborist or biologist.
 2. Root pruning will be minimized, and if necessary, any root pruning required for construction purposes shall receive the prior approval of, and be supervised by, a consulting arborist.
 4. If injury should occur to any tree during construction, it shall be evaluated as soon as possible by the consulting arborist or biologist to determine if impact should be accounted for in the mitigation requirements.
 5. No excess soil, chemicals, debris, equipment or other materials shall be placed or stored within the Tree Protection Zone.
- Upon completion of construction, barren soil within the project site shall be hydroseeded with a mixture of appropriate native seed mix and stabilizing emulsion to minimize the likelihood of erosion. Areas below the top of bank and above the Ordinary High Water Mark will have biodegradable jute matting placed prior to hydroseeding and will include supplemental perennial shrub plantings as well.

- Potential impacts to special status plants and special status plant communities will be assessed further under CEQA documentation.

8 Conclusion

The purpose of this survey was to identify and map CRPR plants and sensitive plant communities within the project potential construction limits if present. The 2017 Alternative 1 PSB did not observe sensitive-plant species to be present within the PSB. Properties on the east side of SR 162 comprising a portion of Alternative 2 were not surveyed for special status species in 2017. Alternative 2 was surveyed where the proposed trail overlaps with Alternative 1. Additional seasonally appropriate survey of the area not surveyed as part of the 2017 Alternative 2 PSB is necessary prior to construction (if Alternative 2 is proposed). Federally-listed plant species or critical habitat for these species was also reviewed and were not identified in the project area. This effort and reporting is intended to help guide the design and construction of the project in a manner which avoids and minimizes impacts to plant species described herein.

9 References

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Attachments

1. Figures

Figure 1: Vicinity Map

Figure 2: Project Site

2. Tables

Table 3. Scoping List of Special status Plant Species and Plant Communities with Potential to Occur in the PSB



Memorandum

Table 3 Scoping List of Special status Plant Species and Plant Communities with Potential to Occur in the PSB

Scientific Name Common Name	Status	Habitat	Likelihood of Occurrence	Survey Results (Alternative 1 PSB)	Bloom
<i>Alisma gramineum</i> (grass alisma)	2B.2	Marshes and Swamps. / 125-1735 m.	No Potential	Not Present. Marsh habitat not present	Jun-Aug
<i>Anisocarpus scabridus</i> (scabrid alpine tarplant)	1B.3	Upper montane coniferous forest / Open stony ridges, metamorphic scree slopes of peaks, and cliffs in or near red fir forest. 1650-2300 m.	No Potential	Not present. montane habitat not present	Jul-Aug
<i>Arctostaphylos manzanita</i> <i>ssp. elegans</i> (Konocti manzanita)	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest. / Volcanic soils. 225-1830 m.	No Potential	Not present. chaparral not present	May
<i>Botrypus virginianus</i> (rattlesnake fern)	2B.2	Bogs and fens, lower montane coniferous forest, meadows and seeps, riparian forest / 715-1355 m.	No Potential	Not present. Riparian forest not present in footprint	Jun-Aug
<i>Brasenia schreberi</i> (watershield)	2B.3	Freshwater marshes & swamps. / Aquatic from water bodies both natural and artificial. 30-2200 m.	Low Potential.	Not Present. Aquatic habitat not observed in footprint.	Jun-Aug
<i>Calystegia collina</i> <i>ssp. tridactylosa</i> (three-fingered morning-glory)	1B.2	Chaparral, cismontane woodland. / Rocky, gravelly openings in serpentine. 605-705 m.	No Potential	Not present. chaparral not present	May-Jun
<i>Epilobium luteum</i> (yellow willowherb)	2B.3	Lower montane coniferous forest / along streams and seeps. 1580-2200 m.	No Potential	Not present. coniferous not present	Jul-Aug
<i>Epilobium nivium</i> (Snow Mountain willowherb)	1B.2	Upper montane coniferous forest, chaparral. / volcanic and metavolcanic outcrops, crevices, & talus. 1400-2200 m.	No Potential	Not present. coniferous & outcrops not present	Jun-Aug
<i>Epilobium oreganum</i> (Oregon fireweed)	1B.2	Bogs, fens & springs / lower & upper montane coniferous forest / sometimes serpentine. 500-2240 m.	No Potential	Not present. montane not present	Jun-Aug
<i>Hesperolinon adenophyllum</i> (glandular western flax)	1B.2	Chaparral, cismontane woodland, valley and foothill grassland. / generally found in serpentine chaparral. 150 - 1345 m.	Low Potential	Not present. Serpentine habitat not present.	May-Aug

<i>Horkelia tenuiloba</i> (thin-lobed horkelia)	1B.2	Broadleaved upland forest, chaparral, valley and foothill grassland. / Sandy soils; mesic openings. 50-500 m.	Moderate	Not observed. Low quality mesic sites	May-Jul
<i>Howellia aquatilis</i> (water howellia)	FT, 2B.2	Freshwater marshes and swamps. / clear ponds with other aquatics and surrounded by ponderosa pine forest and sometimes riparian associates. 1095-1380 m.	No Potential	Not present. Aquatic habitat not present	Jun
<i>Lasthenia burkei</i> (Burkes's Goldfields)	FE, 1B.1	Foothill woodland, Freshwater Wetlands. / Vernal-pools and wet meadows. < 500 m.	Low Potential	Not present. wet meadows not present	May-Jun
<i>Lasthenia conjugens</i> (Contra Costa Goldfields)	FE, 1B.1	Valley Grassland, Freshwater Wetlands. / Vernal-pools and wet meadows. < 500 m.	Low Potential	Not present. Wet meadows not present	May-Jun
<i>Lewisia stebbinsii</i> (Stebbins' lewisia)	1B.2	Upper & lower montane coniferous forest / barren exposed ridges and slopes in nutrient poor soils (mostly serpentine). 1695-2050 m.	No Potential	Not present. Montane and serpentine habitat not present	May-Jul
<i>Limnanthes bakeri</i> (Baker's meadowfoam)	1B.1	Marshes and margins, swamps, meadows, & seeps / valley and foothill grassland / Seasonally moist or saturated sites within grassland; swales, roadside ditches. 175-915 m.	High	Not observed. Potential habitat in ditches present.	May
<i>Lupinus milo-bakeri</i> (Milo Baker's lupine)	ST, 1B.1	Cismontane woodland, valley and foothill grassland. / roadside ditches, dry gravelly areas along roads, and along small streams. 380-430 m.	High	Not observed. Previously mapped near site, yet low quality habitat observed.	Jun-Aug
<i>Ophioglossum pusillum</i> (northern adder's-tongue)	2B.2	Marshes & edges, swamps, meadows & seeps. / low pastures, grassy roadside ditches / 1085-1935 m.	Moderate	Not observed. Low quality ditch areas present, generally higher elevation.	Jul
<i>Piperia candida</i> (white-flowered rein orchid)	1B.2		Low Potential	Not observed. Low quality habitat present	May-Aug
<i>Potamogeton epihydrus</i> (Nuttall's ribbon-leaved pondweed)	2B.2	Marshes and swamps. / Shallow water, ponds, lakes, streams, irrigation ditches / 295-2640 m	Low Potential	Not Present. Permanent aquatic areas not present in footprint	Jul-Aug
<i>Sanguisorba officinalis</i> (great burnet)	2B.2	Freshwater wetlands, Coniferous & mixed evergreen forests. / Meadows, marshes, bogs & fens / 60 - 1400 m.	Low Potential	Not present. coniferous not present	Jul-Aug
<i>Sidalcea oregana ssp. hydrophila</i> (marsh checkerbloom)	1B.2	Meadows & seeps, riparian forest / Wet soil of streambanks, meadows / 455-2030 m	Moderate Potential	Not observed. Low quality habitat present	Jul-Aug

<i>Trifolium amoenum</i> (snowy indian clover)	FE, 1B.1	Valley Grassland, wetland-riparian. / Moist, heavy soil, disturbed areas. <100 m.	High Potential	Not observed. Potential habitat present	May-Jun
<i>Viburnum ellipticum</i> (oval-leaved viburnum)	2B.3	Yellow Pine Forest, Chaparral. / N-facing slopes. 300 - 1400 m.	No Potential	Not present. habitat not present	May-Jun
Upland Douglas Fir Forest	S3.1		Moderate Potential	Not Present	
Valley Oak Woodland	S2.1		High Potential	Present Alternative 1 and 2	

NOTES:

A. For the 2017 survey, sensitive-listed plants were not observed within PSB-west.

B. Database print outs are available from project proponent

FEDERAL--U.S. Fish and Wildlife Service (USFWS)

FE Federal Endangered

FT Federal Threatened

FC Federal Candidate for listing

TSC United States Fish and Wildlife Service Federal Species of Special Concern

FD Federal Delisted

STATE--California Department of Fish and Wildlife (CDFW)

SE State Endangered

ST State Threatened

SP State Proposed for listing (SE or ST)

SR State Rare

SSC CDFW Species of Special Concern

CFP California Fully Protected Species

SD State Delisted

California Native Plant Society Rare Plant Ranks (CRPR)

1A- Presumed Extirpated in California and either Rare or extinct elsewhere

1B - Rare, Threatened, or Endangered in California and elsewhere

2 - Rare, Threatened or Endangered in California, but more common elsewhere

2A- Plants Presumed Extirpated in California, but more common elsewhere

2B- Plants Rare, Threatened, or Endangered in California, but more common elsewhere

3 - Review List (more information needed)

4 - Watch List (limited distribution in California)

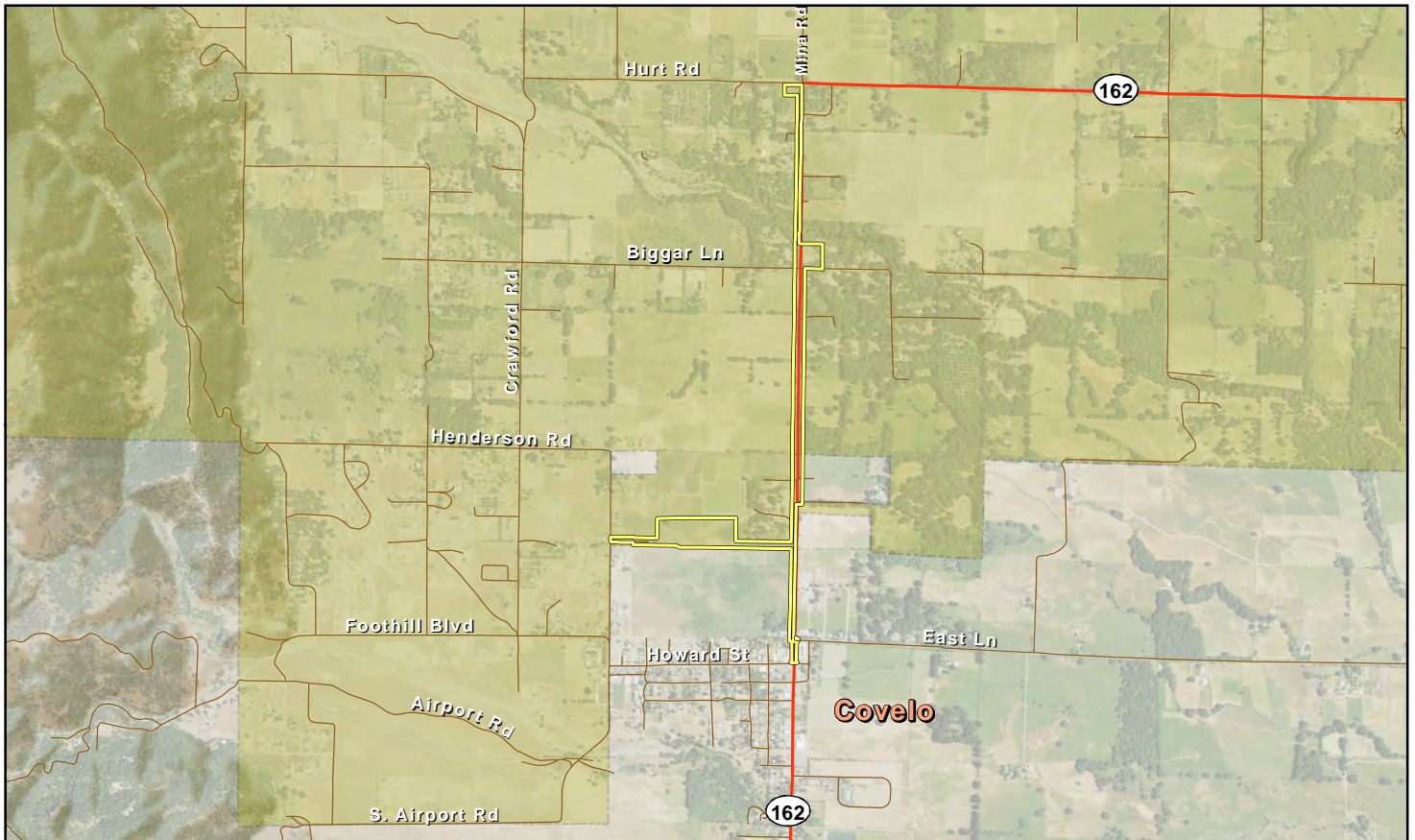
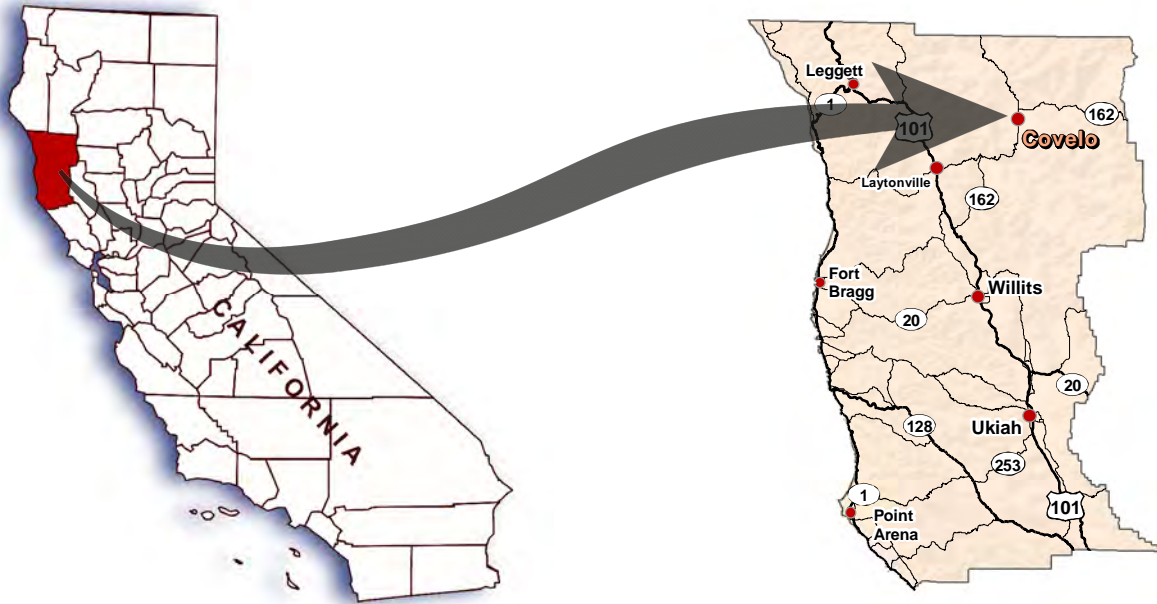
Threat Ranks:

_0.1 Seriously threatened in California

_0.2 Moderately threatened in California

0.3 Not very threatened in California

POTENTIAL TO OCCUR	
No Potential	Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime)
Low Potential	Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
Moderate Potential	Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
High Potential	All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
SURVEY RESULTS	
Not Present	Species not observed during survey and further lacks habitat components and unlikely to be present.
Not Observed	Species not observed during plant survey although potential habitat is present.
Present	Species observed on the site or has been recorded (i.e. CNDDDB, other reports) on the site recently.



- Project Area
- State Route 162
- Round Valley Reservation
- Local Roads

Paper Size 8.5" x 11" (ANSI A)

0 0.1 0.2 0.3 0.4 0.5

Miles

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

Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Revision B
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Vicinity Map

Figure 1



Habitat



Quercus sp. complex (Q. lobata and/or Q. garryana)

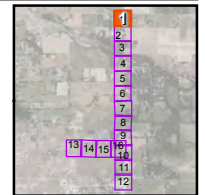


--- Surveyed Property Line



Mendocino County GIS Parcel Data

Staging Area



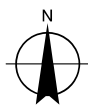
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Feet

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

Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Habitat Survey

Figure 2.1



Habitat



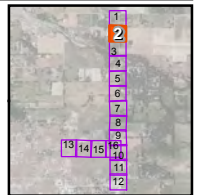
Quercus sp. complex (Q. lobata and/or Q. garryana)

--- Surveyed ROW Line



Mendocino County GIS Parcel Data

----- Surveyed Property Line



Paper Size 8.5" x 11" (ANSI A)

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Feet

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

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


Habitat Survey

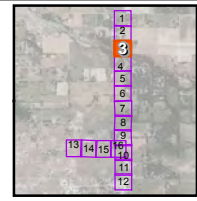
Figure 2.2



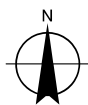
Habitat

-  OHWM
-  *Quercus sp. complex (Q. lobata and/or Q. garryana)*

-  Surveyed Property Line
-  Surveyed ROW Line
-  Mendocino County GIS Parcel Data



Paper Size 8.5" x 11" (ANSI A)
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 Map Projection: Lambert Conformal Conic
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Habitat Survey

Figure 2.3



Habitat

OHWM

Quercus sp. complex (Q. lobata and/or Q. garryana)



Valley Oak (*Quercus lobata*) Alliance

Surveyed Property Line

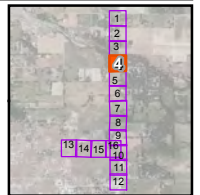
Surveyed ROW Line



Mendocino County GIS Parcel Data



Staging Area



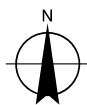
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Horizontal Datum: North American 1983

Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Habitat Survey

Figure 2.4



Habitat



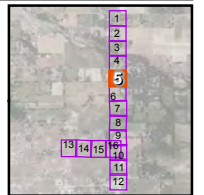
Valley Oak (*Quercus lobata*)
Alliance

----- Surveyed ROW Line



Mendocino County GIS Parcel
Data

----- Surveyed Property Line



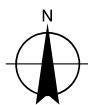
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Horizontal Datum: North American 1983

Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Habitat Survey

Figure 2.5



Habitat

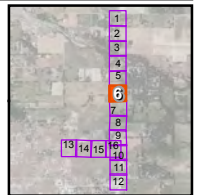


Valley Oak (*Quercus lobata*)
Alliance



Mendocino County GIS Parcel
Data

----- Surveyed Property Line



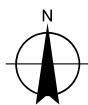
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Feet

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

Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Habitat Survey

Figure 2.6



Habitat



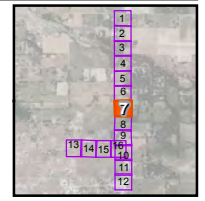
Valley Oak (*Quercus lobata*)
Alliance

--- Surveyed ROW Line



Mendocino County GIS Parcel
Data

--- Surveyed Property Line



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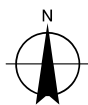
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Feet

Map Projection: Lambert Conformal Conic

Horizontal Datum: North American 1983

Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Habitat Survey

Figure 2.7



Habitat



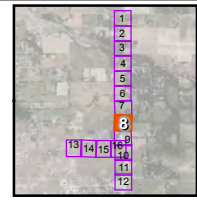
Valley Oak (*Quercus lobata*) Alliance

--- Surveyed ROW Line



Mendocino County GIS Parcel Data

--- Surveyed Property Line



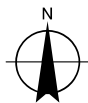
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Habitat Survey

Figure 2.8



Habitat



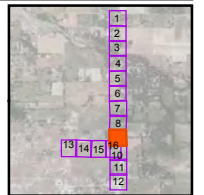
Valley Oak (*Quercus lobata*)
Alliance

----- Surveyed ROW Line



Mendocino County GIS Parcel
Data

----- Surveyed Property Line



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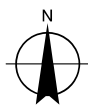
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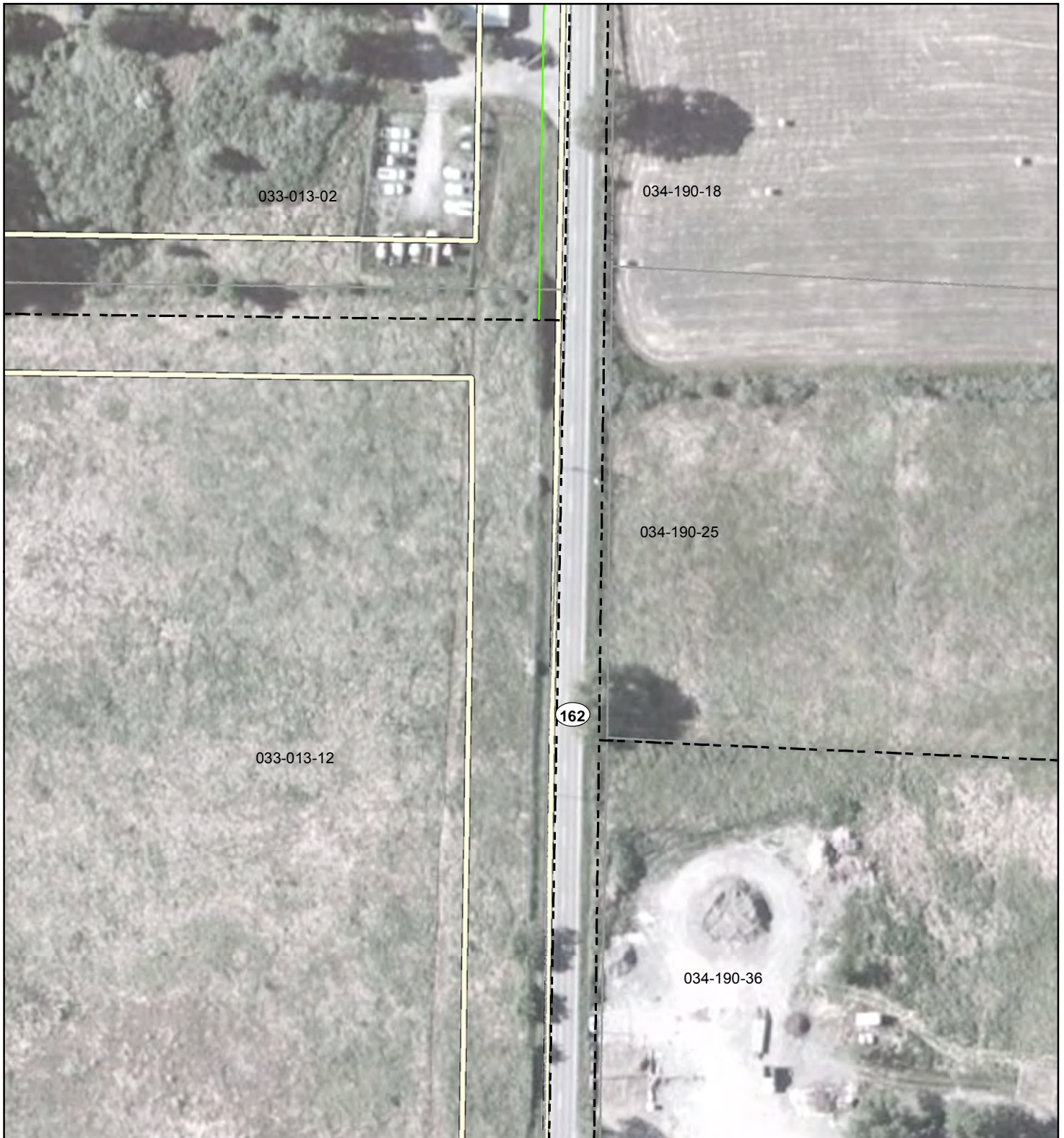



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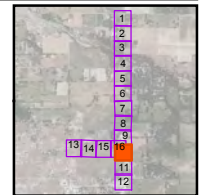
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Revision | F
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Habitat Survey

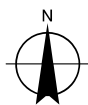
Figure 2.9



- Surveyed Property Line
- Surveyed ROW Line
-  Mendocino County GIS Parcel Data



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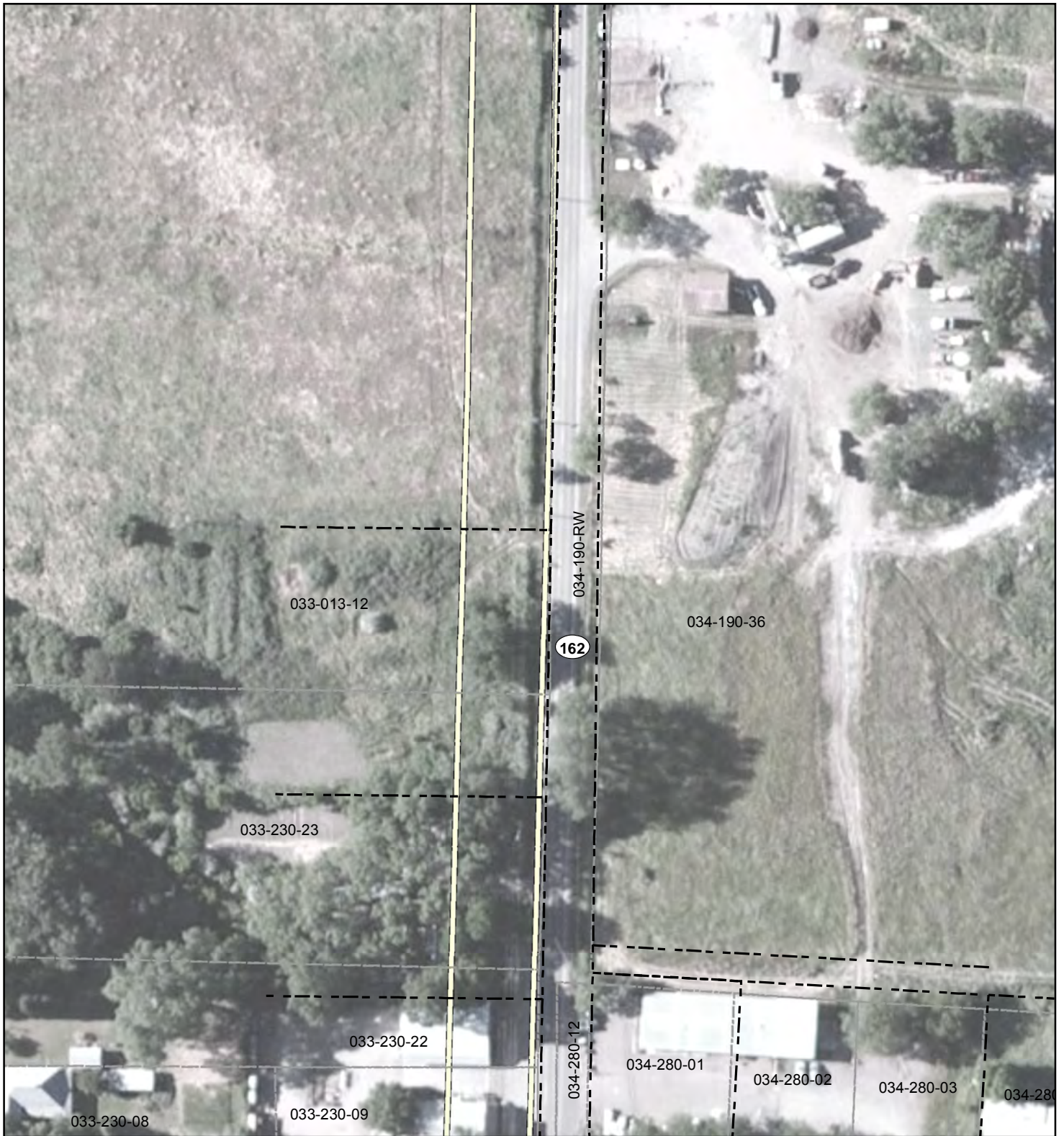


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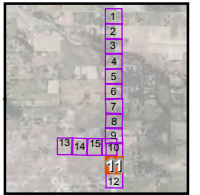
Habitat Survey

Figure 2.10



----- Surveyed Property Line

 Mendocino County GIS Parcel Data



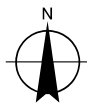
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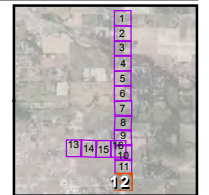
Job Number | 11110706
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Date | 18 Sep 2017

Habitat Survey

Figure 2.11



----- Surveyed Property Line
 Mendocino County GIS Parcel Data



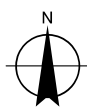
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Feet

Map Projection: Lambert Conformal Conic
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Grid: NAD 1983 StatePlane California II FIPS 0402 Feet




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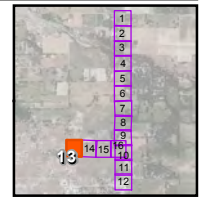
Job Number | 11110706
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Habitat Survey

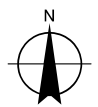
Figure 2.12



- Surveyed Property Line
- Surveyed ROW Line
-  Mendocino County GIS Parcel Data



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 Feet



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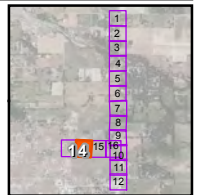
Job Number | 11110706
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Habitat Survey

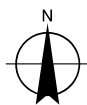
Figure 2.13



- Surveyed Property Line
- Mendocino County GIS Parcel Data
- Staging Area



Paper Size 8.5" x 11" (ANSI A)
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 Feet
 Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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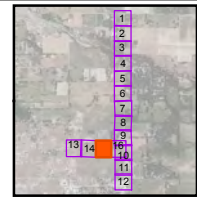
Figure 2.14



----- Surveyed Property Line

 Mendocino County GIS Parcel Data

 Staging Area



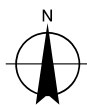
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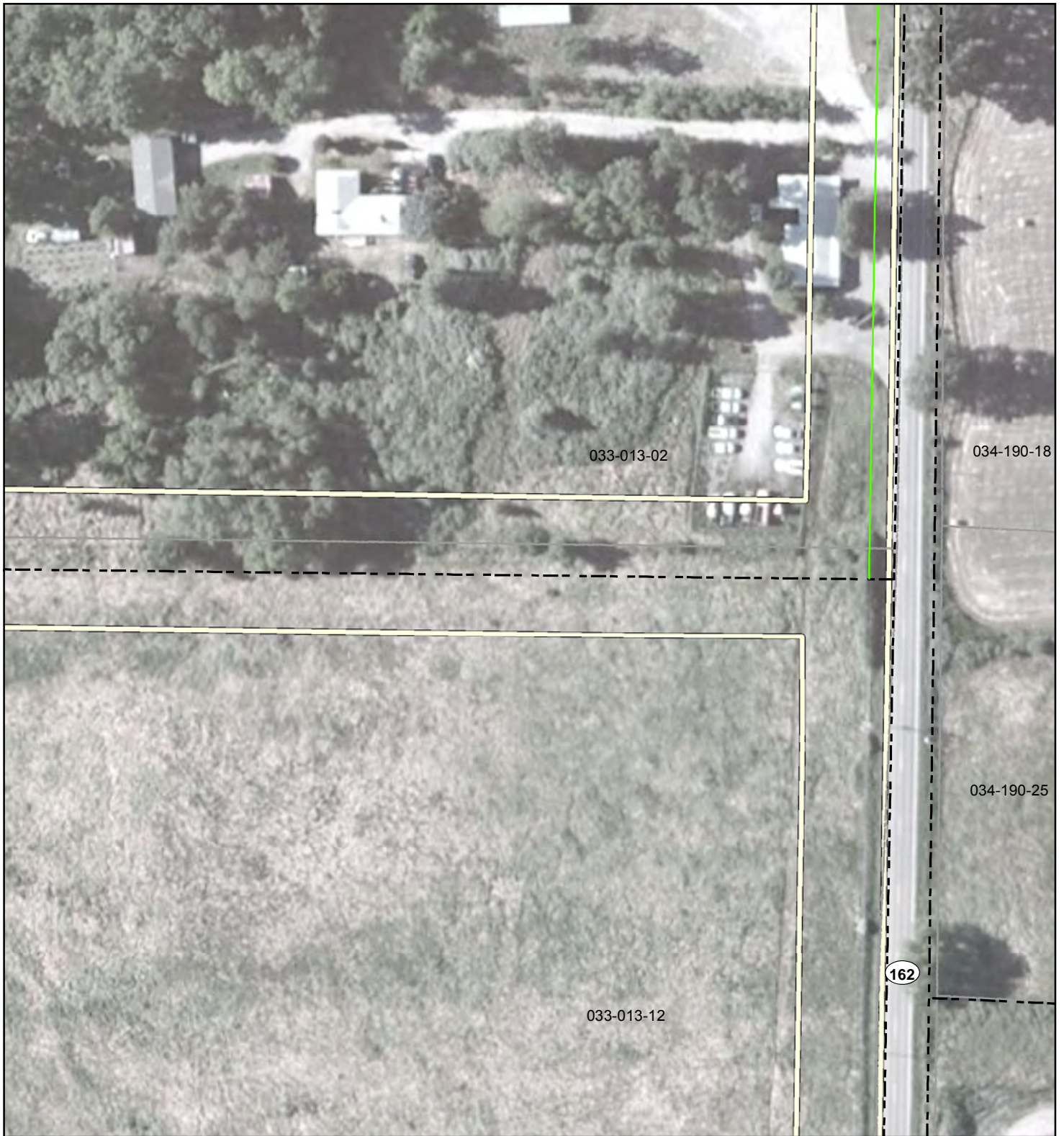



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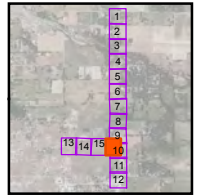
Job Number | 11110706
Revision | F
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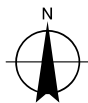
Figure 2.15



- Surveyed Property Line
- Surveyed ROW Line
-  Mendocino County GIS Parcel Data



Paper Size 8.5" x 11" (ANSI A)
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 Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Habitat Survey

Figure 2.16

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Appendix C Table of special-status wildlife species with potential to occur in the PSB

Scientific and Common Name	Status	Habitats	Potential to Occur
Birds			
<i>Accipiter cooperii</i> (Cooper's Hawk)	S4	Cismontane & riparian forest/woodland, upper montane coniferous forest. Nest sites mainly in riparian of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	High. Suitable nesting trees/foraging habitat around project site.
<i>Accipiter gentilis</i> (Northern Goshawk)	SSC, S3	Within, and in vicinity of, coniferous forest. Uses old nests, and maintains alternate sites. Usually nests on north slopes, near water. Red fir, lodgepole pine, Jeffrey pine, and aspens are typical nest trees.	Low. Suitable nesting or foraging habitat does not exist on or adjacent to the project site.
<i>Agelaius tricolor</i> (Tricolored Blackbird)	SC-E, S1S2	Freshwater marsh, marsh & swamp, and wetland. Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.	Moderate. Colony discovered at Covelo Wastewater Treatment Plant in 2010. No other more recent records are known. If still present in project area, individuals could forage along the creek.
<i>Ardea herodias</i> (Great Blue Heron)	Not listed	Adaptable to a variety of habitats including most saltwater and freshwater bodies, agricultural land, swamps, wetlands, as well as commercial and residential areas such as golf courses. Nesting habitat includes trees, bushes, artificial structures, or the ground adjacent to a water body.	Moderate. The site has potential foraging habitat and roosting in larger trees on or adjacent to the site. Based on available data, the presence of established colonies at the site is unlikely. However, based on available habitat, the species has a moderate potential

Scientific and Common Name	Status	Habitats	Potential to Occur
			to be present and forage within the project area.
<i>Baeolophus inornatus</i> (Oak Titmouse)	S4	Warm, dry oak or oak-pine woodlands. Oak woodlands cavity nester.	High. Numerous records exist for the species in the general area of the project site. Nesting and foraging habitat present onsite.
<i>Brachyramphus marmoratus</i> (Marbled Murrelet)	FT	Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	Low. There is not breeding or foraging habitat present directly on or adjacent to the project site.
<i>Chaetura vauxi</i> (Vaux's Swift)	SSC, S2S3	Lower montane & north coast coniferous forest, oldgrowth, redwood, Douglas-fir. Nests in large hollow trees & snags. Often nests in flocks. Forages over most terrains and habitats but shows a preference for foraging over rivers and lakes.	Moderate. Detected in Covelo during the spring and summer months. Likely using creeks and nearby Eel River as foraging habitat. No known snags or other possible breeding observed at or directly adjacent to the project site.
<i>Charadrius alexandrinus nivosus</i> (Western Snowy Plover)	FT	Sandy beaches, salt pond levees & shores of large alkali lakes.	Low. There are not records from the project site or area. No beach habitat present at the project site. Critical habitat is not designated for this species by USFWS in the project area.
<i>Coccyzus americanus</i> (Yellow-billed Cuckoo)	FT, SE	Riparian habitat with willows and cottonwoods.	None. No suitable nesting or foraging habitat existing on or adjacent to the project site. No records of the species from the area.
<i>Elanus leucurus</i> (White-tailed Kite)	S3S4	Cismontane & riparian woodland, marsh & swamp, valley & foothill grassland, and wetland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Moderate. Could forage in open grassland/pasture around project site.
<i>Falco mexicanus</i> (Prairie Falcon)	S4	Great Basin grassland, great Basin scrub, mojavean desert scrub,	Low. No suitable nesting habitat onsite. Species records from the

Scientific and Common Name	Status	Habitats	Potential to Occur
		sonoran desert scrub, valley & foothill grassland. Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	site are likely winter visitors foraging in surrounding valley and foothill grasslands.
<i>Strix occidentalis caurina</i> (Northern Spotted Owl) Wildlife	FT	Nests in old-growth redwood-dominated forests	Low. Habitat not present on or adjacent to site.
<i>Antrozous pallidus</i> (pallid bat)	SSC, S3	Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting. / Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Moderate. Nesting sites unlikely onsite.
<i>Bombus caliginosus</i> (obscure bumble bee)	None, S1S2	Coastal areas from Santa Barbara county to north to Washington state. / Food plant genera include Baccharis, Cirsium, Lupinus, Lotus, Grindelia and Phacelia.	No Potential. site is non-coastal
<i>Corynorhinus townsendii</i> (Townsend's big-eared bat)	SSC, S2	Throughout California in a wide variety of habitats. Most common in mesic sites. / Roosts in the open, hanging from walls & ceilings. Roosting sites limiting. extremely sensitive to human disturbance.	Moderate. Nesting sites unlikely onsite
<i>Emys marmorata</i> (western pond turtle)	SSC, S3	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. / Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Low. Basking sites not observed at creek crossing.
<i>Lasiurus blossevillii</i> (western red bat)	SSC, S3	Roosts primarily in trees, 2-40 ft above ground, from sea level up	Moderate. Unlikely to nest in trees onsite as site is highly disturbed

Scientific and Common Name	Status	Habitats	Potential to Occur
		through mixed conifer forests. / Prefers habitat edges & mosaics with trees that are protected from above & open below with open areas for foraging.	and developed, trees have sparse coverage.
<i>Lasiurus cinereus</i> (hoary bat)	None, S4	Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding. / Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Moderate. Unlikely to nest in trees onsite as site is highly disturbed and developed, trees have sparse coverage.
<i>Myotis evotis</i> (long-eared myotis)	None, S3	Found in all brush, woodland & forest habitats from sea level to about 9000 ft. prefers coniferous woodlands & forests. / Nursery colonies in buildings, crevices, spaces under bark, & snags. Caves used primarily as night roosts.	Moderate. colony sites unlikely onsite, no snags observed on or adjacent to site.
<i>Oncorhynchus mykiss irideus</i> (summer-run steelhead trout)	SSC, S2	Calif coastal streams south to Middle Fork Eel River. Within range of Klamath Mtns province DPS & No. Calif DPS. / Cool, swift, shallow water & clean loose gravel for spawning, & suitably large pools in which to spend the summer.	Moderate.
<i>Pekania pennanti</i> (fisher - West Coast DPS)	FP-T, SC-T, SSC, S2S3	Intermediate to large-tree stages of coniferous forests & deciduous-riparian areas with high percent canopy closure. / Uses cavities, snags, logs & rocky areas for cover & denning. Needs large areas of mature, dense forest.	Low.
<i>Rana boylei</i> (foothill yellow-legged frog)	SC, SSC, S3	Partly-shaded, shallow streams & riffles with a rocky substrate in a variety of habitats. / Need at least some cobble-sized substrate for	High. Could be present in the creek that bisects the project alignment.

Scientific and Common Name	Status	Habitats	Potential to Occur
		egg-laying. Need at least 15 weeks to attain metamorphosis.	
<i>Rana draytonii</i> (California Red-legged Frog)	FT	Generally near permanent water, but can be found far from water, in damp woods and meadows, during non-breeding season.	Moderate. Breeding fresh water areas are present adjacent and under the alignment within the creek. Adults can disperse considerable distances during non breeding season and could be present in moist areas of site and culverts.
<i>Taxidea taxus</i> (American badger)	SSC, S3	Most abundant in drier open stages of shrub, forest, and herbaceous habitats, with friable soils. / Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Low. Burrow areas unlikely present.
Habitats			
North Central Coast Summer Steelhead Stream	SNR	High Potential	Present
Upland Douglas Fir Forest	S3.1	Moderate Potential	Not Present
Valley Oak Woodland	S2.1	High Potential	Present

FEDERAL--U.S. Fish and Wildlife Service (USFWS)	
FE	Federal Endangered
FT	Federal Threatened
FC	Federal Candidate for listing

TSC	United States Fish and Wildlife Service Federal Species of Special Concern
FD	Federal Delisted
STATE--California Department of Fish and Wildlife (CDFW)	
SE	State Endangered
ST	State Threatened
SP	State Proposed for listing (SE/ST)
SR	State Rare
SSC	CDFW Species of Special Concern
CFP	California Fully Protected Species
SD	State Delisted
POTENTIAL TO OCCUR	
No Potential	Habitat on and adjacent to the site is clearly unsuitable for the species requirements (cover, substrate, elevation, hydrology, plant community, site history, disturbance regime)
Low Potential	Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
Moderate Potential	Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
High Potential	All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
Present	Observed onsite.

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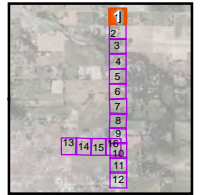
Jurisdictional Wetland Delineation

Palustrine Emergent Persistent (PEM1)

Surveyed Property Line

Project Study Boundary

Staging Area



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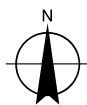
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 Covelo SR 162 Corridor Multi Purpose
 Trail Project

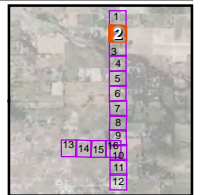
Wetland Delineation
 5/09, 5/10, 6/12 & 9/07/2017

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 Date | 13 Sep 2017

Figure 2.1



- Surveyed Property Line
- Surveyed ROW Line
- Project Study Boundary



Paper Size 8.5" x 11" (ANSI A)
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 Horizontal Datum: North American 1983
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Wetland Delineation
 5/09, 5/10, 6/12 & 9/07/2017



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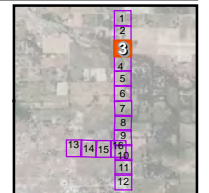
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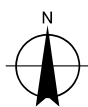
Jurisdictional Wetland Delineation

-  Waters of the U.S. - Creek (OHWM)
-  Surveyed Property Line

-  Surveyed ROW Line
-  Project Study Boundary



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Wetland Delineation
 5/09, 5/10, 6/12 & 9/07/2017



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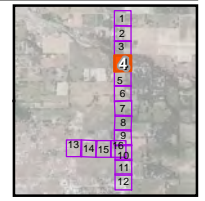
Jurisdictional Wetland Delineation

-  Palustrine Emergent Persistent (PEM1)
-  Waters of the U.S. - Creek (OHWM)

Reconnaissance Wetland Boundary

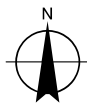
-  Palustrine Emergent Persistent (PEM1)
-  Surveyed Property Line

-  Surveyed ROW Line
-  Project Study Boundary
-  Staging Area



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Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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 5/09, 5/10, 6/12 & 9/07/2017

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Figure 2.4





Jurisdictional Wetland Delineation

 Palustrine Emergent-Ditch (PEM1m)


Reconnaissance Wetland Boundary

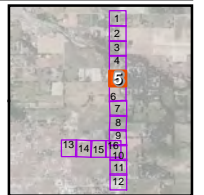
 Palustrine Emergent Persistent (PEM1)

 Palustrine Emergent-Ditch (PEM1m)

 Surveyed Property Line

 Surveyed ROW Line

 Project Study Boundary



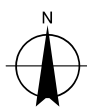
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Figure 2.5



Jurisdictional Wetland Delineation

Palustrine Emergent-Ditch (PEM1m)

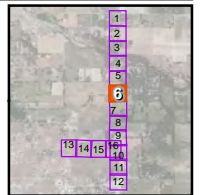
Reconnaissance Wetland Boundary

Palustrine Emergent Persistent (PEM1)

Palustrine Emergent-Ditch (PEM1m)

Surveyed Property Line

Project Study Boundary



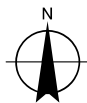
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Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Figure 2.6





Jurisdictional Wetland Delineation


 Palustrine Emergent-Ditch (PEM1m)

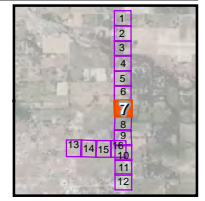
Reconnaissance Wetland Boundary

 Palustrine Emergent-Ditch (PEM1m)

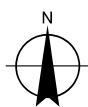
 Surveyed Property Line

 Surveyed ROW Line

 Project Study Boundary



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Wetland Delineation
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

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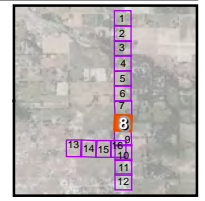
Jurisdictional Wetland Delineation

-  Palustrine Emergent Persistent (PEM1)
-  Palustrine Emergent-Ditch (PEM1m)

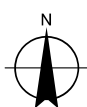
-  Other Waters - ditch (OHWM)
- Reconnaissance Wetland Boundary**
-  Palustrine Emergent Persistent (PEM1)

-  Palustrine Emergent-Ditch (PEM1m)
-  Surveyed Property Line
-  Surveyed ROW Line

-  Project Study Boundary



Paper Size 8.5" x 11" (ANSI A)
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 Feet
 Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Figure 2.8



Jurisdictional Wetland Delineation



Palustrine Emergent Persistent (PEM1)



Palustrine Emergent-Ditch (PEM1m)



Other Waters - ditch (OHWM)

Reconnaissance Wetland Boundary



Palustrine Emergent Persistent (PEM1)



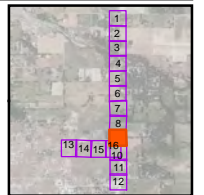
Palustrine Emergent-Ditch (PEM1m)

--- Surveyed Property Line

--- Surveyed ROW Line



Project Study Boundary



Paper Size 8.5" x 11" (ANSI A)

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Feet

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

Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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
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Figure 2.9




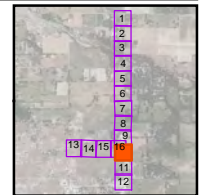
Jurisdictional Wetland Delineation

 Palustrine Emergent-Ditch (PEM1m)

 Surveyed Property Line

 Surveyed ROW Line

 Project Study Boundary



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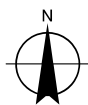
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
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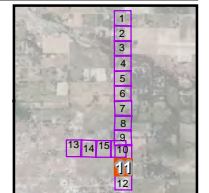
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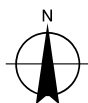
Jurisdictional Wetland Delineation

-  Palustrine Emergent-Ditch (PEM1m)
-  Surveyed Property Line

-  Project Study Boundary



Paper Size 8.5" x 11" (ANSI A)
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 Map Projection: Lambert Conformal Conic
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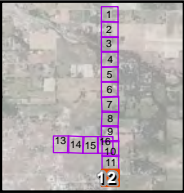
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Wetland Delineation
 5/09, 5/10, 6/12 & 9/07/2017

Figure 2.11



- Surveyed Property Line
- Project Study Boundary



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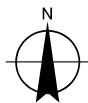
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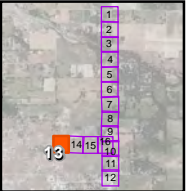
Wetland Delineation
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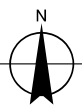
Figure 2.12



- Surveyed Property Line
- Surveyed ROW Line
- Project Study Boundary



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 Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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
Figure 2.13

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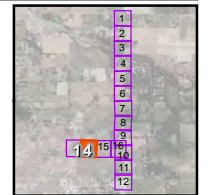
Jurisdictional Wetland Delineation

 Palustrine Emergent Persistent (PEM1)

 Surveyed Property Line

 Project Study Boundary

 Staging Area



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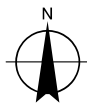
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Trail Project

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
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Date | 13 Sep 2017

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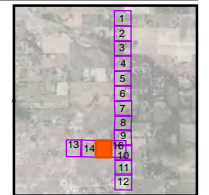
Jurisdictional Wetland Delineation

 Palustrine Emergent Persistent (PEM1)

 Surveyed Property Line

 Project Study Boundary

 Staging Area



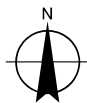
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Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Trail Project


Wetland Delineation
5/09, 5/10, 6/12 & 9/07/2017


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Date | 13 Sep 2017


Figure 2.15




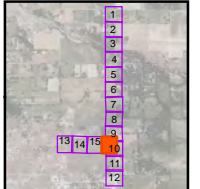
Jurisdictional Wetland Delineation

 Palustrine Emergent-Ditch (PEM1m)

 Surveyed Property Line

 Surveyed ROW Line

 Project Study Boundary



Paper Size 8.5" x 11" (ANSI A)

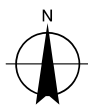
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Feet

Map Projection: Lambert Conformal Conic

Horizontal Datum: North American 1983

Grid: NAD 1983 StatePlane California II FIPS 0402 Feet



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Figure 2.16

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