

NOTICE OF CEQA EXEMPTION

To: Lassen County Clerk
220 South Lassen Street
Susanville, CA 96130

From: Honey Lake Valley RCD
1516 Main Street
Susanville, CA 96130
530-260-0067

Date: January 23, 2025

Project Title:

Honey Lake Valley Resource Conservation District Ravendale Water System Improvements Project

Project Location:

Ravendale, Lassen County, California (CA)

Project Description:

The Ravendale Water System Improvements project is located in Ravendale, California, a Census Designated Place (CDP) off of highway U.S. 395 approximately 52 miles north of Susanville. The proposed improvements to the local water system include the jack and bore of +/- 70 linear feet of steel pipe installed per Caltrans design standards under highway U.S. 395, the proposed installation of +/- 380 linear feet of water service lateral along School House Road and a proposed 3,000-gallon fire water storage cistern also adjacent to School House Road.

Exempt Status (Guidelines Section and Class): Categorical Exemption:

15303, which exempts new construction or conversion of small structures.

Reasons Why Project is Exempt:

This review for water system improvement construction activities concludes that project implementation as designed would have less than significant impact in each resource area. Class 3 exemption (CCR Section 15303) covers the construction and location of limited numbers of new, small facilities or structures, installation of small new equipment and facilities in small structures, and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. The Honey Lake Valley Resource Conservation District (RCD) has determined that the objective of the project and the implementation activities as designed for this project are all new construction or conversion of a limited number of small structures and therefore fit within the CCR Section 15303 exemption. Additional environmental analysis was conducted by Environmental Specialists regarding proposed project effects on rare, threatened and endangered plants; threatened, endangered and special status wildlife species; and cultural resources. The Honey Lake Valley Resource Conservation District (HLVRCD) has reviewed these reports and determined that the project's implementation will result in multiple benefits. There will be no significant adverse impacts on endangered, rare, or threatened species or their habitats. There are no hazardous materials at or around the project site. The

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project will avoid all archeological resource sites. The project will not result in cumulatively significant impacts. The Project will have no significant adverse effect on the environment.

Public Agencies that will be involved with the project:

Honey Lake Valley Resource Conservation District
Lassen Land and Trails Trust

Lead Agency Contact Person:

Kelsey Siemer, District Manager
Honey Lake Valley Resource Conservation District
530-260-0067

Signature: _____



Jesse Claypool, Chairman
Honey Lake Valley Resource Conservation District

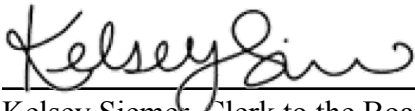
Date: 01/23/2025

ATTEST:

I, Kelsey Siemer, Clerk to the Board of Directors, Honey Lake Valley Resource Conservation District, do hereby certify that the Honey Lake Valley Resource Conservation District approved this Notice of Exemption on the 23rd day of January, 2025 by the following vote:

Ayes: 5
Noes: 0

Abstentions: 0
Absent: 0



Kelsey Siemer, Clerk to the Board of Directors
Honey Lake Valley Resource Conservation District

Honey Lake Valley Resource Conservation District (HLVRCD)
ENVIRONMENTAL REVIEW REPORT FOR AN EXEMPT PROJECT

Author: Kelsey Siemer

Title: District Manager

Address: 1516 Main Street, Susanville, CA 96130

Phone: (530) 260-0067

Email: kmarks@honeylakevalleyrcd.us

Project Name: Ravendale Water System Improvements

Project Number: CA DWR #4600013813 and #4600015403

Program Type: State of California Department of Water Resources Integrated Regional Water Management Grant, Proposition 1, Round 1 and Round 2

County: Lassen

Acres: Bore and Jack +/- 70 LF Bore and Jack, +/- 380 LF proposed water service lateral, and 128 sq. ft. proposed fire water storage cistern

Legal Location: 40° 47' 54.61" N, - 120° 21' 56.78" W (Bore and Jack), 40° 47' 52.47" N, - 120° 22' 0.91" W (proposed water service lateral), 40° 47' 52.49" N, -120° 21' 59.80" W (proposed cistern)
Ravendale, Lassen County, California (CA)

Other Public Agency Review or Permit Required:

Would the project result in:	YES	NO
Alterations to a watercourse (DFW – Lake and Stream Alteration Agreement)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Conversion of timberland (Susanville Indian Rancheria Conversion Permit or Exemption)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Demolition (Local Air District – Demolition Permit)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soil disturbance over 1 acre (RWQCB – SWPPP)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Other:

Discuss any above-listed topic item checked Yes and consultation with agencies:

HONEY LAKE VALLEY RESOURCE CONSERVATION DISTRICT ENVIRONMENTAL CHECKLIST FORM

NOTE: The following report form is intended for use by the Honey Lake Valley Resource Conservation District (HLVRCD) staff to document a limited environmental impact analysis supporting the filing of a Notice of Exemption (NOE) document for water system improvements in Ravendale. Based on this analysis, the project appears to meet the exemption since the project creates no possible significant effects as discussed in CEQA Guidelines for Categorical Exemption Class 3 in Section 15303, new construction or conversion of small structures. This report will be filed with the CEQA administrative record for this project to document the environmental impact analysis conducted by the District.

1. Project title: Honey Lake Valley Resource Conservation District (HLVRCD) Ravendale Water System Improvements

2. Lead agency name and address:

Honey Lake Valley Resource Conservation District

1516 Main Street, Susanville, CA 96130

3. Contact person and phone number: Kelsey Siemer, District Manager

4. Project location: Ravendale, California

5. Project sponsor's name and address:

Lassen Land and Trails Trust

601 Richmond Rd.

Susanville, CA 96130

Amy Holmen

(530) 257-3252

6. General plan designation: Agricultural

7. Zoning: Census Designated Place

8. Description of project:

The Ravendale Water System Improvements project is located in Ravendale, California a Census Designated Place (CDP) off of highway U.S. 395 approximately 52 miles north of Susanville. The proposed improvements to the local water system include the jack and bore of +/- 70 linear feet of steel pipe installed per Caltrans design standards under highway U.S. 395, the proposed installation of +/- 380 linear feet of water service lateral along School House Road and a proposed 3,000-gallon fire water storage cistern also adjacent to School House Road.

9. Surrounding land uses and setting:

Ravendale was once a railroad stop for the Nevada-California-Oregon railway and the railway is now owned by the Southern Pacific Railroad (Purdy, 2024). There is a herd management area (HMA) operated by the Bureau of Land Management (BLM) near the town of Ravendale (U.S. Dept of the Interior Bureau of Land Management (BLM), 2024).

10. Other public agencies whose approval is required:

The Project will be developed with the project stakeholders: HLVRCD is the grant administrator and the lead agency, the town of Ravendale is the operator, and Lassen Land and Trails Trust is the owner. Building Permits and Plumbing Permits will be obtained from Lassen County.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

This project does not involve any affiliation traditionally or culturally with the California Native American Tribes.

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

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 type="checkbox"/> Agriculture / Forestry Resources	<input type="checkbox"/> Air Quality
<input type="checkbox"/> Biological Resources	<input type="checkbox"/> Cultural Resources	<input type="checkbox"/> Energy
<input type="checkbox"/> Geology/Soils	<input type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Hazards and Hazardous Materials
<input type="checkbox"/> Hydrology/Water Quality	<input type="checkbox"/> Land Use / Planning	<input type="checkbox"/> Mineral Resources
<input type="checkbox"/> Noise	<input type="checkbox"/> Population / Housing	<input type="checkbox"/> Public Services
<input type="checkbox"/> Recreation	<input type="checkbox"/> Transportation	<input type="checkbox"/> Tribal Cultural Resources
<input type="checkbox"/> Utilities / Service Systems	<input type="checkbox"/> Wildfire	<input type="checkbox"/> Mandatory Findings of Significance

Conclusion

☒ After assessing potential environmental impacts and evaluating the description for the various classes of categorical exemptions to CEQA, the Honey Lake Valley RCD has determined that the project fits within one or more of the exemption classes and no exceptions exist at the project site which would preclude the use of this exemption. The Honey Lake Valley RCD considered the possibility of (a) sensitive location, (b) cumulative impact, (c) significant impact due to unusual circumstances, (d) impacts to scenic highways, (e) activities within a hazardous waste site, and (f) significant adverse change to the significance of a historical resource. A notice of exemption will be filed with the Lassen County Clerk and the State Clearinghouse.

☐ After assessing potential environmental impacts and evaluating the description for the various classes of categorical exemptions to CEQA, the Honey Lake Valley RCD has determined that the project does not fit within the description for the various exemption classes or has found that exceptions exist at the project site that precludes the use of a categorical exemption for this project. Additional environmental review will be conducted and the appropriate CEQA document used may be a negative declaration or a mitigated negative declaration.

Signed:



Jesse Claypool, Chairman, Board of Directors
Honey Lake Valley Resource Conservation District

1/23/2025
Date

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VIII. GREENHOUSE GAS EMISSIONS. Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

X. HYDROLOGY AND WATER QUALITY. Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i) result in a substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVI. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVIII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a determination by the waste water 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA Environmental Checklist Form Explanations

Project: Ravendale Water System Improvements

III. Air Quality, Part C:

Level of Significance: Less than significant impact

General construction activities may involve a temporary increase in air pollutant concentrations from dust. The contractor is anticipated to have a water truck or other means of onsite to control dust.

IV. Biological, Part A:

Level of Significance: Less than significant impact

The United States Fish and Wildlife Service (USFWS) IPaC was queried to determine if any ESA species were found within the project area. The species included in the IPaC were the two proposed threatened species; monarch butterfly, *Danaus Plexippus*, and the northwestern pond turtle, *Actinemys marmorata*. The size of the project area is less than 1 acre, and these improvements are occurring in an already disturbed area of an existing water system and include boring under a highway. Therefore, it is unlikely that there will be any impact to the species listed in the IPaC.

XIII. Noise, Part B:

Level of Significance: Less than significant impact

Jack and boring or Horizontal Directional Drilling (HDD) will be used to install a steel water pipe underneath highway U.S. 395 and some minor ground borne vibration may be heard in the surrounding area during the time of this activity. This activity will only be performed during normal working hours to minimize disruption.

XIX. Utilities, Part A-E:

Level of Significance: No Impact

This project does not involve any disturbance to any natural water features and only involves additions to an existing water system including a water service line, a fire cistern, and a jack and bore of an steel pipe under highway U.S. 395 which are not anticipated to cause significant environmental impacts.

References

- Purdy, T. (2024). *The Naming of Ravendale, California*. Retrieved from Exploring Lassen County's Past: <https://tipurdy.org/the-naming-of-ravendale-california/>
- U.S. Dept of the Interior Bureau of Land Mangement (BLM). (2024). *New Ravendale HMA*. Retrieved from U.S. Dept of the Interior Bureau of Land Mangement (BLM): <https://www.blm.gov/programs/wild-horse-and-burro/herd-management/herd-management-areas/california/new-ravendale>
- U.S. Fish and Wildlife Service (USFWS) IPaC . (2024). *IPaC Resource List*. USFWS.

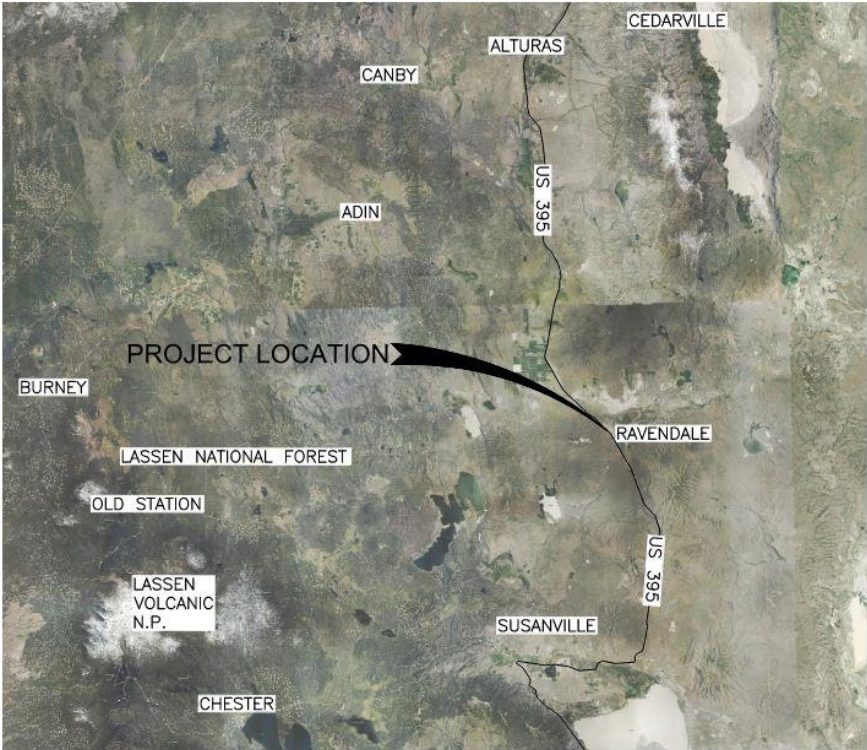
Attachments:

- I. Ravendale Project Maps
- II. Project Plans
- III. USFWS IPaC report

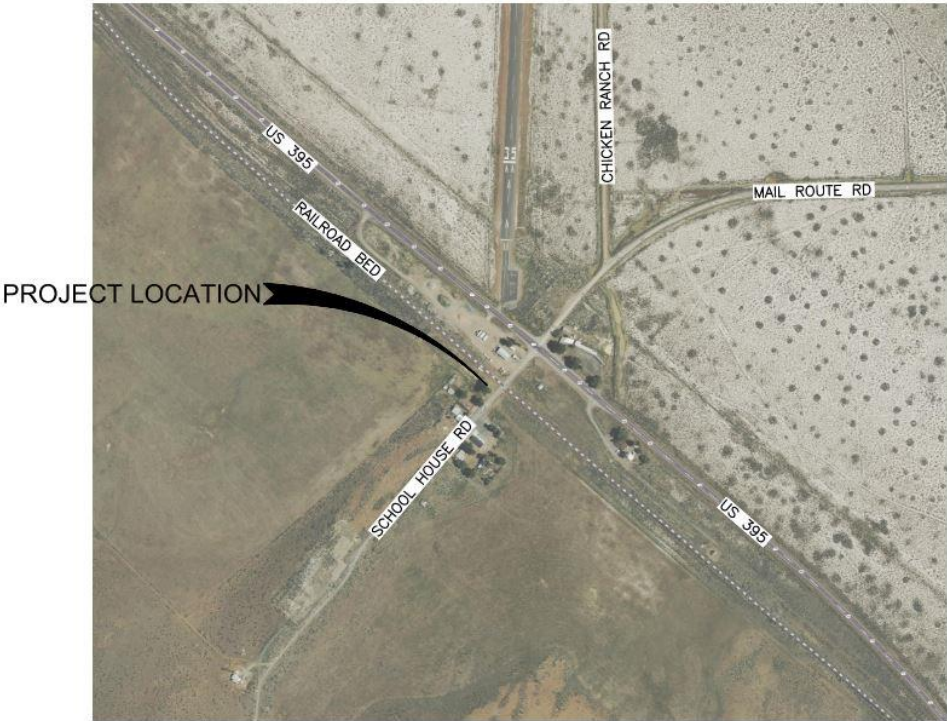
Attachment I
Ravendale Project Maps

Ravendale Water System Improvements

VICINITY MAP



LOCATION MAP



Attachment II
Ravendale Project Plans

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ANDREA STUEMKY
(530) 260-0067

TOWN OF RAVENDALE
JIM DAVIS
(530) 234-2036

RAVENDALE WATER SYSTEM IMPROVEMENTS

LASSEN COUNTY, CALIFORNIA

PROJECT LOCATION

BURNEY

CANBY

ALTURAS

ADIN

CEDARVILLE

US 395

RAVENDALE

US 395

SUSANVILLE

CHESTER

OLD STATION

LASSEN NATIONAL FOREST

LASSEN VOLCANIC N.P.

PROJECT LOCATION

US 395

RAILROAD BED

SCHOOL HOUSE RD

CHICKEN RANCH RD

MAIL ROUTE RD

Sheet Number	Sheet Title
G-001	TITLE SHEET
G-002	GENERAL NOTES
C-100	INDEX SHEET
C-501	DETAILS
C-502	DETAILS

10-28-21

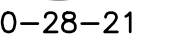
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM (ZONE 1), NAD 83(2011). ANY BEARINGS SHOWN ARE AT A GRID AZIMUTH, ALL DISTANCES SHOWN ARE GRID VALUES. BASED ON GPS OBSERVATIONS ON NATIONAL GEODETIC SURVEY (NGS) DATA SHEET FOR DESIGNATION: HPGN CA 02 20 PID: LT0818.

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS NAVD88, BASED UPON NGS BM: HPGN CA 02 20 PID: LT0818. ELEVATION = 5300.32. COMPLETED OCTOBER 2021.



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Reno, NV 89502

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OTHER RESERVED RIGHTS OF THESE DRAWINGS, AND THE SAME SHALL NOT BE REUSED WITHOUT J-U-B'S PRIOR WRITTEN CONSENT. ANY REUSE WITHOUT WRITTEN CONSENT BY J-U-B WILL BE AT CLIENT'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO J-U-B.

REVISION					
NO.	DESCRIPTION	BY	APPR.	DATE	

RAVENDALE WATER SYSTEM IMPROVEMENT IS
LASSEN COUNTY, CALIFORNIA

ווררררררר

: 49-21-079 RAVEN G-001 TIT

PROJ. # : ----

OWN BY: ----

CKED BY:

ONE INCH

AT FULL SIZE, IF NOT ONE

INCH. SCALE ACCORDINGLY
 UPDATED: 4/5/2024

FEET NUMBER:

LET NUMBER.

G-001

G-001

Plot Date: 4/8/2024 8:58 AM Plotted By: Alex Mustard
Date Created: 4/5/2024 \\JUB.COM\CENTRAL\CLIENTS\CAHONEY\AKERCDD\PROJECTS\49-21-079 RAVENDALE\MADELINE\DESIGN\CAD\SHEET_RAVENDALE\49-21-079 RAVEN G-001 TITLE.DWG

GENERAL NOTES

1. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, AND THE ENGINEER, HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING FACILITIES.
3. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER.
4. ALL WORK TO BE PERFORMED UNDER THE CONTRACT SHALL BE IN STRICT ACCORDANCE WITH THESE PLANS AND ACCOMPANYING CONTRACT DOCUMENTS.
5. CONTRACTOR SHALL POTHOLE, LOCATE, AND VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES TO BE AFFECTED OR CONNECTED TO DURING CONSTRUCTION.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ENGINEER TO VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE AND TO CROSS CHECK DETAILS AND DIMENSIONS SHOWN ON THE DRAWINGS.
7. IN ALL CASES WHERE A CONFLICT MAY OCCUR SUCH AS ITEMS COVERED BY SPECIFICATIONS OR NOTES ON THE DRAWINGS OR BETWEEN GENERAL NOTES AND SPECIFIC DETAILS, THE ENGINEER SHALL BE NOTIFIED AND HE WILL INTERPRET THE INTENT OF THE CONTRACT DOCUMENTS.
8. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS, OR DETAILS ON DRAWINGS.
9. THE TYPES, LOCATIONS, SIZES, AND DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE IMPROVEMENT PLANS WERE OBTAINED FROM AVAILABLE RECORDS. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES, HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS OF THOSE UTILITIES SHOWN AND ANY THAT MAY EXIST AND ARE NOT SHOWN PRIOR TO COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL EXPOSE ALL UNDERGROUND FACILITIES THAT ARE TO BE CONNECTED TO OR THAT ARE IN THE PATH OF THE PROPOSED IMPROVEMENTS FOR VERIFICATION OF LOCATION AND ELEVATION PRIOR TO COMMENCING CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICES ALERT (U.S.A.) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK FOR DETERMINATION AND LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH ALL UTILITY PROVIDERS.
10. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS AND DRAWINGS AND THE LATEST REGULATIONS OF:
 - A. UNIFORM BUILDING, MECHANICAL, AND PLUMBING CODE
 - B. CALIFORNIA ADMINISTRATION CODE
 - C. CALIFORNIA OSHA
 - D. AMERICAN WATER WORKS STANDARD PLANS AND SPECIFICATIONS
 - E. CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS WHERE APPLICABLE
 - F. AMERICAN CONCRETE INSTITUTE STANDARD SPECIFICATIONS
12. CONTRACTOR TO MAINTAIN 2 SETS OF AS-BUILT DRAWINGS WITH THE CHANGES NOTED IN RED. BOTH SETS TO BE TURNED OVER TO LASSEN COUNTY AT JOB COMPLETION FOR INSPECTION BY THE OWNER AND THE ENGINEER AT WHICH TIME THEY WILL BE DETERMINED TO BE ACCEPTABLE OR NOT. IF DIFFERENCES ARE FOUND IN ANY OF THE WORK, THE OWNER WILL MAKE NOTE OF THESE DEFICIENCIES IN WRITING, STATING REASONS. AFTER COMPLETING WORK, CONTRACTOR SHALL RESUBMIT A REQUEST FOR CERTIFICATION OF COMPLETION AND A NEW FINAL INSPECTION. AFTER ALL DEFICIENCIES HAVE BEEN CORRECTED TO THE ACCEPTANCE OF THE OWNER AND ENGINEER, A LETTER OF FINAL ACCEPTANCE WILL BE ISSUED.
13. CONTRACTOR SHALL ADHERE TO THE NORTH LAHONTAN BASIN REGIONAL WATER QUALITY CONTROL BOARD PROJECT GUIDELINES FOR EROSION CONTROL. CONTRACTOR TO PREPARE AND IMPLEMENT SWPPP.
14. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND FEATURES AS SHOWN ON THESE PLANS IS BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
15. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATIONS AND/OR ELEVATIONS AT THE PROPOSED POINTS OF CONNECTION AND IN AREAS OF POSSIBLE CONFLICT PRIOR TO BEGINNING CONSTRUCTION. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES BETWEEN THE CONDITIONS EXISTING IN THE FIELD AND THE INFORMATION SHOWN ON THESE DRAWINGS, HE SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
16. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE OR RELOCATE ALL EXISTING UTILITIES AND FEATURES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. CONTRACTOR SHALL OBTAIN APPROVALS FROM THE GOVERNING AGENCIES, THE ENGINEER, AND THE UTILITY COMPANIES PRIOR TO SUCH REMOVAL AND/OR RELOCATION.
17. THE CONTRACTOR ASSUMES ALL RISK FOR ANY CONSTRUCTION PERFORMED WITH BID-SET OR NON-APPROVED PLANS.
18. CONTRACTOR TO PROVIDE, INSTALL, AND MAINTAIN ALL ROAD CONSTRUCTION, BARRICADES, CHANNELING DEVICES, CONSTRUCTION SIGNS, AND OTHER TRAFFIC CONTROL IN CONFORMANCE WITH THE LATEST EDITION OF MUTCD WHENEVER CONSTRUCTION IS IN PROGRESS WITHIN THE PUBLIC TRAVELED WAY.
19. TRAFFIC ACCESS SHALL BE MAINTAINED FOR LOCAL RESIDENTS TO PROPERTIES ALONG AND WITHIN CONSTRUCTION BOUNDARIES.
20. ALL CONNECTIONS TO EXISTING LINES NOT SPECIFICALLY CALLED OUT ON THE PLANS ARE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE PIPELINE, AND SHALL NOT BE PAID FOR SEPARATELY.
21. FITTINGS REQUIRED FOR NEW PIPELINE CONNECTIONS, PIPELINE ABANDONMENT, OR AT OTHER PROJECT LOCATIONS BEYOND THOSE SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
22. THE CONTRACTOR SHALL PROVIDE MEANS OF MANAGING ANY STORMWATER, GROUNDWATER, OR NUISANCE WATER FROM INTERFERING WITH THE CONSTRUCTION OPERATION. THE COST OF CONTROLLING ALL WATER SHALL BE INCLUDED IN THE CONTRACT PRICE FOR RELATED BID ITEMS.
23. ALL VALVES, JOINTS, FITTINGS AND OTHER PIPE CONNECTIONS SHALL BE RESTRAINED APPROPRIATELY ACCORDING TO SPECIFICATIONS AND DETAILS.
24. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND ADMINISTERING TRAFFIC CONTROL WHERE WORK AFFECTS THE SAFETY OR FUNCTIONALITY OF ROADWAYS.
25. ALL WORK WITHIN CAL TRANS RIGHT-OF-WAY SHALL ADHERE TO THEIR ENCROACHMENT PERMIT.
26. ALL PLAN AND PROFILES PROVIDED HEREIN ARE CONSIDERED DIAGRAMMATIC UNLESS NOTED OTHERWISE.
27. THE CONTRACTOR MUST COORDINATE THE LOCATION AND SIZE OF STAGING AREAS WITH LASSEN COUNTY AND OTHER APPLICABLE AGENCIES.
28. ALL FITTINGS, PIPING, & GASKETS IN CONTACT WITH DRINKING WATER SHALL CARRY NSF61 THIRD PARTY CERTIFICATION.
29. ALL DUCTILE IRON FITTINGS & PIPING SHALL BE WRAPPED IN HIGH-DENSITY CROSS-LAMINATED POLYETHYLENE.

GENERAL EROSION CONTROL MEASURES
TO BE APPLIED TO ALL PROJECTS - NOT
TO REPLACE SWPPP REQUIREMENTS FOR
PROJECTS ONE ACRE AND ABOVE

NORTH LAHONTAN BASIN PROJECT GUIDELINES FOR EROSION CONTROL
(REVISED AUGUST, 1988)

- SURPLUS OR WASTE MATERIAL SHOULD NOT BE PLACED IN DRAINAGEWAYS, OR WITHIN THE 100-YEAR FLOOD PLAIN OF ANY SURFACE WATER..

b. ALL LOOSE PILES OF SOIL, SILT, CLAY, SAND, DEBRIS, OR OTHER EARTHEN MATERIALS SHOULD BE PROTECTED IN A REASONABLE MANNER TO PREVENT THE DISCHARGE OF THESE MATERIALS TO WATERS OF THE STATE.

c. AFTER COMPLETION OF A CONSTRUCTION PROJECT, ALL SURPLUS OR WASTE EARTHEN MATERIALS SHOULD BE REMOVED FROM THE SITE AND DEPOSITED IN AN APPROVED DISPOSAL LOCATION OR STABILIZED ON SITE.

d. DE-WATERING SHOULD BE DONE IN A MANNER SO AS TO ELIMINATE THE DISCHARGE OF EARTHEN MATERIALS FROM THE SITE.

e. ALL DISTURBED AREAS SHOULD BE STABILIZED BY APPROPRIATE SOIL STABILIZATION MEASURES BY OCTOBER 15TH OF EACH YEAR.

f. ALL WORK PERFORMED BETWEEN OCTOBER 15TH AND MAY 1ST OF EACH YEAR SHOULD BE CONDUCTED IN SUCH A MANNER THAT THE PROJECT CAN BE WINTERIZED (ALL SOILS STABILIZED TO PREVENT RUNOFF) WITHIN 48 HOURS, IF NECESSARY.

g. WHERE POSSIBLE EXISTING DRAINAGE PATTERNS SHOULD NOT BE SIGNIFICANTLY MODIFIED.

h. DRAINAGE SWALES DISTURBED BY CONSTRUCTION ACTIVITIES SHOULD BE STABILIZED BY APPROPRIATE SOIL STABILIZATION MEASURES TO PREVENT EROSION.

i. ALL NON-CONSTRUCTION AREAS SHOULD BE PROTECTED BY FENCING, OR OTHER MEANS, TO PREVENT UNNECESSARY DISTURBANCE.

j. DURING CONSTRUCTION, TEMPORARY GRAVEL, HAY BALE, EARTHEN, OR SAND BAG DIKES AND/OR NON-WOVEN FILTER FABRIC FENCES SHOULD BE USED, AS NECESSARY, TO PREVENT DISCHARGE OF EARTHEN MATERIALS FROM THE SITE DURING PERIODS OF PRECIPITATION OR RUNOFF.

k. IMPERVIOUS AREAS SHOULD BE CONSTRUCTED WITH INFILTRATION TRENCHES ALONG THE DOWN-GRADIENT SIDES TO INFILTRATE THE INCREASE IN RUNOFF RESULTING FROM THE NEW IMPERVIOUS AREAS.

l. INFILTRATION TRENCHES, OR SIMILAR PROTECTION FACILITIES, SHOULD BE CONSTRUCTED ON THE DOWN-GRADIENT SIDE OF ALL STRUCTURAL DRIP LINES.

m. RE-VEGETATED AREAS SHOULD BE CONTINUALLY MAINTAINED IN ORDER TO ASSURE ADEQUATE GROWTH AND ROOT DEVELOPMENT. EROSION CONTROL FACILITIES SHOULD BE INSTALLED WITH A ROUTINE MAINTENANCE AND INSPECTION PROGRAM TO PROVIDE CONTINUED INTEGRITY OF EROSION CONTROL FACILITIES.

n. WASTE DRAINAGE WATERS IN EXCESS OF THAT WHICH CAN BE ADEQUATELY RETAINED ON THE PROPERTY SHOULD BE COLLECTED BEFORE SUCH WATERS HAVE A CHANCE TO DEGRADE, AND SHOULD BE TREATED, IF NECESSARY, BEFORE DISCHARGE FROM THE PROPERTY.

o. WHERE CONSTRUCTION ACTIVITIES INVOLVE THE CROSSING AND/OR ALTERATION OF A STREAM CHANNEL, SUCH ACTIVITIES REQUIRE A PRIOR WRITTEN AGREEMENT WITH THE CALIFORNIA DEPARTMENT OF FISH AND GAME AND SHOULD BE TIMED TO OCCUR DURING THE PERIOD IN WHICH STREAM FLOW IS EXPECTED TO BE LOWEST FOR THE YEAR.

ABAN
ABC
AC
ADD
APPROX
APPR
ARV
BC
BGR
BFC
BLDG
BM
BSW
BVC
CB
CJ
CL
CLR
CMP
CMU
CO
CONC
CONN
CONT
COORD
CTR
CU
CU FT
CU IN
CU YD
CULV
DBL
DEP
DTL
DI
DIA
DWG
E
EX OR EXIST
EA
EC
ECC
ELEC
ENGR
EVC

DISINFECTION & TESTING GENERAL PROCEDURES

1. THE OWNER'S WATER DEPARTMENT SHALL BE CONTACTED TO VERIFY PROCEDURES APPLICABLE TO SPECIFIC SITUATIONS.
2. ISOLATED NEW LINE INSTALLATIONS ARE TREATED DIFFERENTLY THAN SYSTEM REPAIRS OR LINE REPLACEMENTS.
3. NO LINE OR FACILITY MAY BE CONNECTED TO THE OWNER'S WATER SYSTEM OR PLACED IN SERVICE PRIOR TO OWNER APPROVAL.
4. INSTALLATION OF ALL MATERIALS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SUPPLIED INSTRUCTIONS. CONTRACTOR SHALL OBTAIN A COPY OF PIPE MANUFACTURER INSTALLATION GUIDE AND MAINTAIN THE COPY ON-SITE.

WATER LINE DISINFECTION - AWWA C651, TABLET METHOD

1. LINES SHALL BE FILLED SLOWLY SO AS NOT TO DISLodge TABLETS, & PURGED OF ALL AIR.
2. PRESSURES SHALL BE MAINTAINED LOWER THAN CHARGING SOURCE DURING DISINFECTION PROCESS.
3. INITIAL CHLORINE RESIDUAL SHALL BE A MINIMUM OF 10 PPM. LINES SHALL BE FLUSHED VIGOROUSLY UNTIL DISCHARGE IS CLEAN AND RESIDUAL IS BELOW 1 PPM. THE OWNER SHALL VERIFY ALL CHLORINE RESIDUALS.
4. BACTERIAL SAMPLES SHALL THEN BE DRAWN AND SENT TO AN OWNER-APPROVED LABORATORY FOR TESTING. IF SAMPLE DOES NOT PASS, REPEAT PROCEDURE. IF SAMPLE PASSES TO SATISFACTION OF OWNER, PRESSURE AND LEAKAGE TESTING MAY PROCEED.
5. OTHER DISINFECTION METHODS MAY BE USED IF APPROVED BY THE OWNER.
6. OWNER SHALL DESIGNATE NUMBERS & LOCATIONS OF ALL TESTS, AS JOB CONDITIONS DICTATE.

WATER LINE PRESSURE/STRENGTH TESTING

1. INSTALLER SHALL PROVIDE NECESSARY PUMPS AND TESTING EQUIPMENT.
2. ALL PRESSURE TESTING PROCEDURES SHALL BE OBSERVED BY THE OWNER AND/OR ENGINEER.
3. LINES MUST MAINTAIN A PRESSURE OF 150 PSI FOR TWO HOURS, UNLESS OTHERWISE SPECIFIED BY THE OWNER.

WATER LINE LEAKAGE TESTING

1. LEAKAGE TESTING MAY BE WAIVED BY OWNER IF PRESSURE TEST INDICATES NEGLIGIBLE LOSS IN PRESSURE.
2. IF REQUIRED, LEAKAGE TESTING SHALL BE PERFORMED AT APPROXIMATE NORMAL OPERATING PRESSURE. TEST SHALL BE A MINIMUM OF TWO HOURS IN DURATION.
3. ALLOWABLE LEAKAGE RATE SHALL BE AS RECOMMENDED BY THE PIPE SUPPLIER. TYPICALLY FOR C900 PVC, ALLOWABLE LEAKAGE PER 50 JOINTS AT 100 PSI WOULD BE: 0.27 GALLONS PER HOUR FOR 4" PIPE.

ABBREVIATIONS

ABAN	ABANDON	EW	EACH WAY	PREFAB	PREFABRICATED
ABC	AGGREGATE BASE COURSE	EXP	JT EXPANSION JOINT	PROP	PROPERTY
AC	ASPHALT CONCRETE	FES	FLARED END SECTION	PSF	POUNDS PER SQUARE FOOT
ADD	ADDITIONAL	FTC	FRONT FACE OF CURB	PSI	POUNDS PER SQUARE INCH
ADJ	ADJACENT	FG	FINISH GRADE	PT	POINT OF TANGENCY
APPROX	APPROXIMATE	FI	FIRE HYDRANT	PUE	PUBLIC UTILITY EASEMENT
APPR	APPROVED	FIG	FIGURE	PVC	POLYVINYL CHLORIDE
APY	AIR RELEASE VALVE	FL	FLOWLINE	PVI	POINT OF VERTICAL INTERSECTION
BC	BEGIN CURVE	FPS	FEET PER SECOND	PVMT	PAVEMENT
BCR	BEGIN CURB RETURN	FT	FOOT OR FEET	R	RADIUS
BFC	BACK FACE OF CURB	F	DEGREE FAHRENHEIT	RCB	REINFORCED CONCRETE BOX CULVERT
BIDG	BUILDING	G	GALLON	RCP	REINFORCED CONCRETE PIPE
BW	BENCH MARK BOT BOTTOM	GAL	GALLOON	RD	ROAD
BSW	BACK OF SIDEWALK	GALV	GALVANIZED	REF	REFERENCE OR REFER
BVC	BEGIN VERTICAL CURVE	GB	GRADE BREAK	REINF	REINFORCED
CB	CATCH BASIN	GPD	GALLONS PER DAY	REOD	REQUIRED
CJ	CAST IRON	HORIZ	HORIZONTAL	RT	RIGHT
CON	CONSTRUCTION JOINT	HP	HORSEPOWER	RW OR ROW	RIGHT-OF-WAY
CL	CENTERLINE	ID	INSIDE DIAMETER	SCH	SCHEDULE
CLR	CLEAR	IE	INVERT ELEVATION	SD	STORM DRAIN
CMP	CORRUGATED METAL PIPE	INCH	INCH	SECT	SECTION
CMU	CONCRETE MASONRY UNIT	INV	INVERT	SF	SQUARE FOOT
CO	CLEANOUT	IRR	IRRIGATION	SI	SQUARE INCH
CONC	CONCRETE	KW	KILOWATT	SSE	SANITARY SEWER EASEMENT
CONN	CONNECTION	L	LENGTH	STA	STATION
CONT	CONTINUOUS	LAT	LATERAL	SIM	SIMILAR
COORD	COORDINATE	LB	POUNDS	SPEC	SPECIFICATIONS
CTR	CENTER	LB/CU FT	POUNDS PER CUBIC FOOT	SQ	SQUARE
CU	CUBIC	LONG	LONGITUDINAL	SS	SANITARY SEWER
CU FT	CUBIC FEET	LET	LEFT	STD	STANDARD
CU IN	CUBIC INCH	LDD	MAX MAXIMUM DRY DENSITY	SYMM	SYMMETRICAL
CU YD	CUBIC YARD	MECH	MECHANICAL	TAN	TANGENT
CULV	CULVERT	MFR	MANUFACTURER	TB	THRUST BLOCK
DBL	DOUBLE	MH	MANHOLE	TC	TOP OF CURB
DEP	DEPRESSED	MIN	MINIMUM	TC-DEP	TOP OF CURB - DEPRESSED
DTL	DETAIL	MISC	MISCELLANEOUS	TECH	TECHNICAL
DIA	DROP INLET	MPH	MILES PER HOUR	TECH	TECHNICAL
DIA	DIAMETER	N	NORTHING	TEL	TELEPHONE
DWG	DRAWING	NDP	NO DIRECT PAYMENT	TEMP	TEMPERATURE
E	EASTING	NTS	NOT TO SCALE	TW	TOP OF WALL
EX OR EXIST	EXISTING	OC	ON CENTER	TYP	TYPICAL
EA	EACH	OZ	ORIGINAL GROUND	V	VELOCITY
EC	END CURVE	OZSHA	OCCUPATIONSL SAFETY AND HEALTH ADMINISTRATION	VC	VERTICAL CURVE
EGR	END CURB RETURN	OUN	OUNCE	VERT	VERTICAL
ECC	ECCENTRIC	PC	POINT OF CURVE	VG	VALLEY GUTTER
EL	ELEVATION	PCC	PORTLAND CEMENT CONCRETE	W	WATER
ELEC	ELECTRIC	PI	POINT OF INTERSECTION		
ENGR	ENGINEER	PL	PROPERTY LINE		
ENC	END OF VERTICAL CURVE	PRC	POINT OF REVERSE CURVE		



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B ENGINEERS,
5190 Neil Road

Reno, NV 89502

Phone: 775.852.1440

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[illegible]

**RAVENDALE WATER SYSTEM IMPROVEMENTS
LASSEN COUNTY, CALIFORNIA**

GENERAL NOTES

FILE : 49-21-079 RAVEN G-001 TITLE

UB PROJ. # : --
DRAWN BY:

DESIGN BY: --

CHECKED BY: _____


AT FULL SIZE, IF NOT ONE
INCH, SCALE ACCORDINGLY

LAST UPDATED: 4/5/2024

SHEET NUMBER:




Plot Date: 4/8/2024 8:59 AM Plotted By: Alex Mustard
Date Created: 4/5/2024 JUB.COM\CENTRAL\CLIENTS\CA\HONEYLAKE\CD\PROJECTS\49-21-079 RAVENDALE\MADELINE\DESIGN\CAD\PROJECTS\49-21-079 RAVEN C-100 INDEX.DWG



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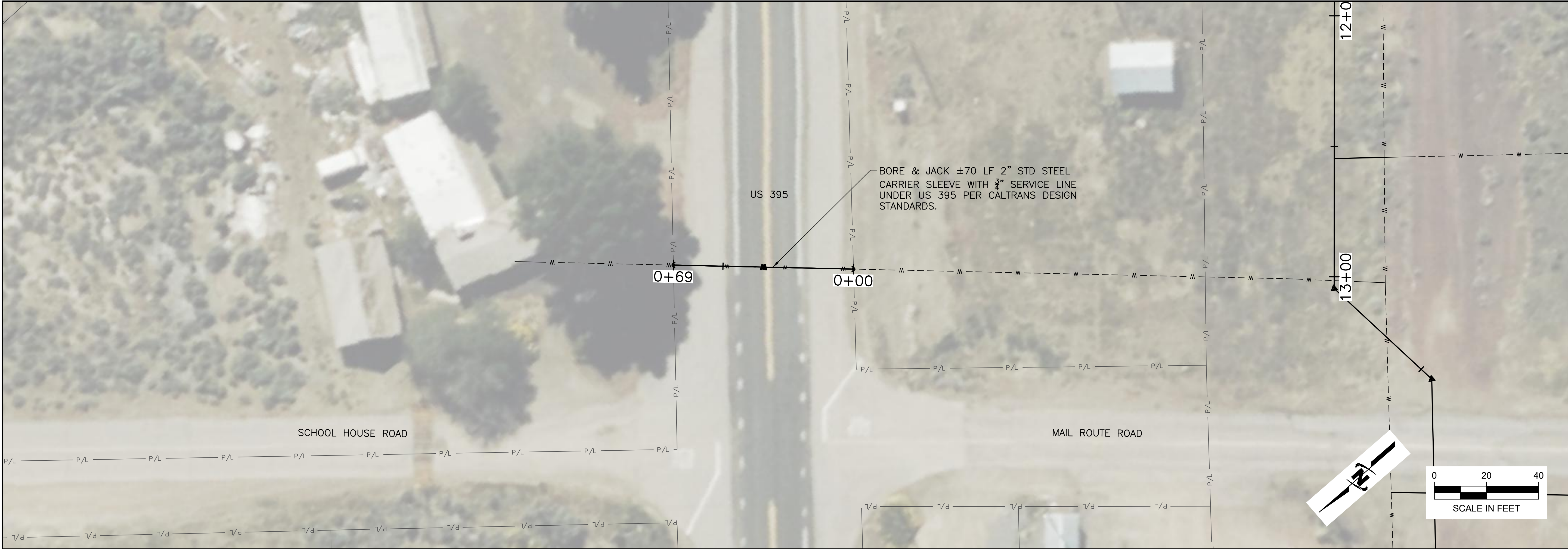
RAVENDALE WATER SYSTEM IMPROVEMENTS
LASSEN COUNTY, CALIFORNIA

INDEX SHEET

FILE: 49-21-079 RAVEN C-100 INDEX
JUB PROJ. #: ---
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DESIGN BY: ---
CHECKED BY: ---
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LAST UPDATED: 4/8/2024
SHEET NUMBER:
C-100

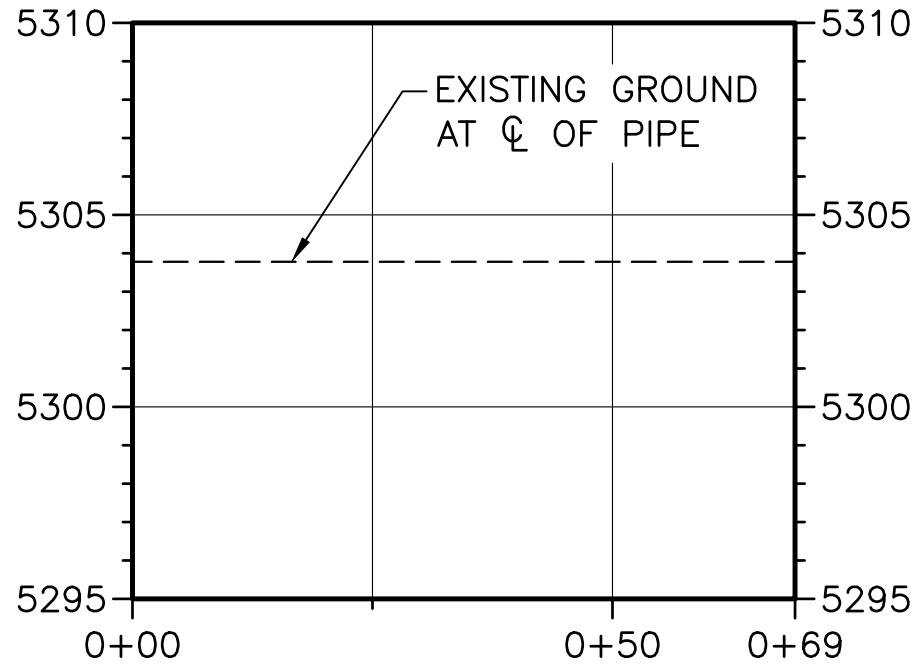
2 working days
Call before you Dig.
1-800-227-2600

Plot Date: 11/10/2024 5:14 PM Plotted By: Peter Seabury
Date Created: 4/9/2024 JUB-001-CENTRAL CLIENTS CA\HONEY LAKE\CD\PROJECTS\49-21-079 RAVENDALE\EMAD\LINE DESIGN\CD\SHEET RAVENDALE-49-21-079 RAVEN C-201X P&P.DWG



WATER CONSTRUCTION NOTES

- 1
- INSTALL NEW C900 PVC CL 235 PSI WATER MAIN (SIZE AS NOTED – SEE PROFILES). REF. DETAIL X, SHEET C50X.



WATER SERVICE NOTES

- ①
- WATER SERVICE (HDPE) EXTENSION. PIPE LENGTH AS REQUIRED. CUT EXISTING SERVICE LINE AT TAP AND CONNECT TO NEW SERVICE LINE WITH COMPRESSION FITTING. NEW SERVICE LINES SHALL BE 1" HDPE FOR EXISTING 3/4" COPPER. TAP SERVICE TO NEW 4" WATER MAIN PER DETAIL X, SHEET C–50X.
- ②
- CUT AND CAP PORTION OF EXISTING SERVICE LINE TO BE ABANDONED. INSTALL SHORTEST PRACTICAL LENGTH OF NEW SERVICE LINE AND CONNECT TO EXISTING SERVICE LINE WITH COMPRESSION FITTING. NEW SERVICE LINES SHALL BE 1" HDPE FOR EXISTING 3/4" COPPER. TAP SERVICE TO NEW 4" WATER MAIN PER DETAIL X, SHEET C–50X.

WATER CONSTRUCTION NOTES

1. PIPE TRENCH SHALL COMPLY WITH DETAIL X, SHEET C–50X. AC SHALL BE PATCHED AS REQUIRED.
2. CONTRACTOR SHALL POTHOLE TO VERIFY DEPTHS AND REQUIRED MATERIALS FOR CONNECTION TO EXISTING. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND BASED ON BEST AVAILABLE INFORMATION.
3. ABANDONED MAINS SHALL BE CONCRETE CAPPED.



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RAVENDALE WATER SYSTEM IMPROVEMENTS
LASSEN COUNTY, CALIFORNIA

PLAN & PROFILES

FILE: 49-21-079_RAVEN_C-201X_P.P

JUB PROJ. #: ---

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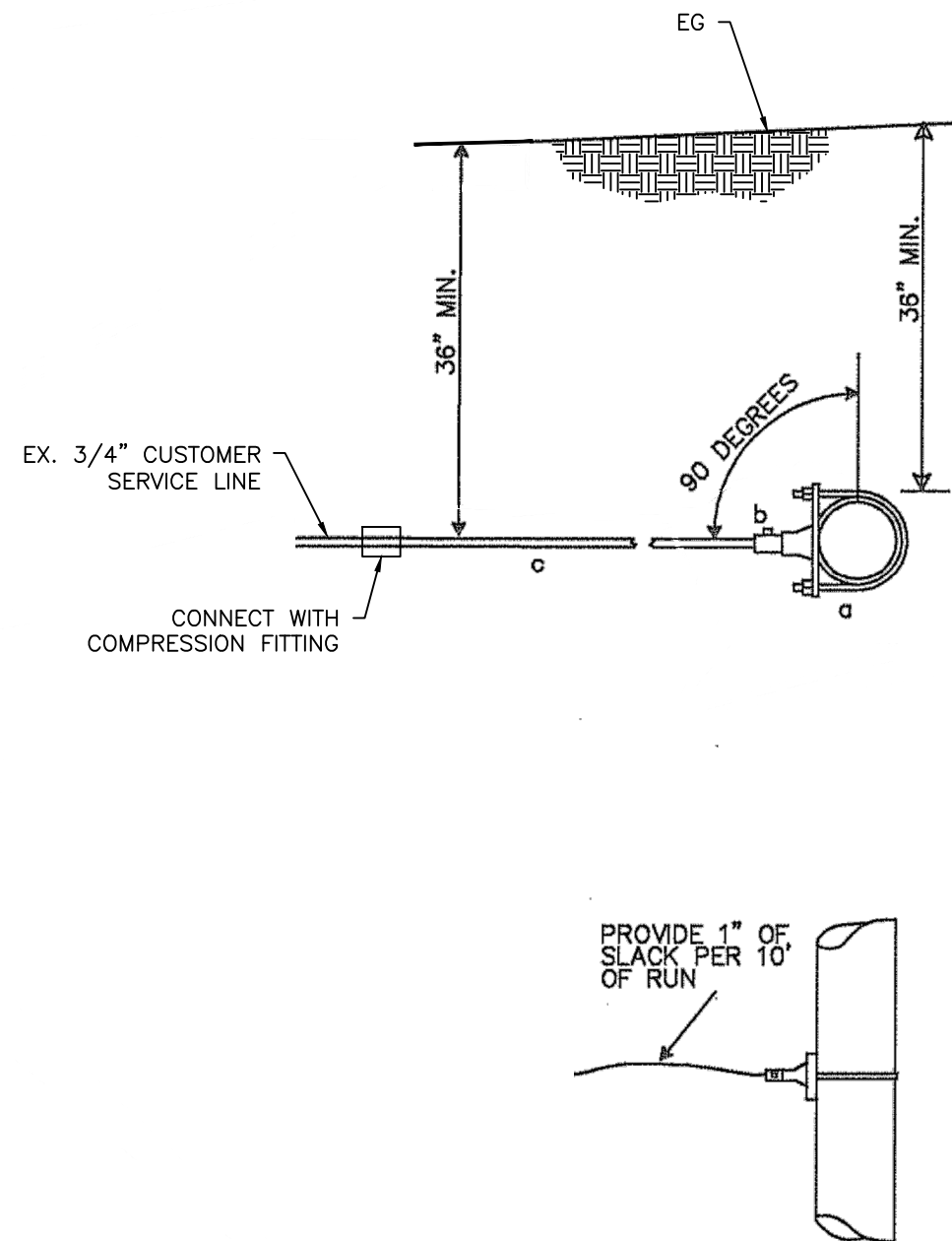
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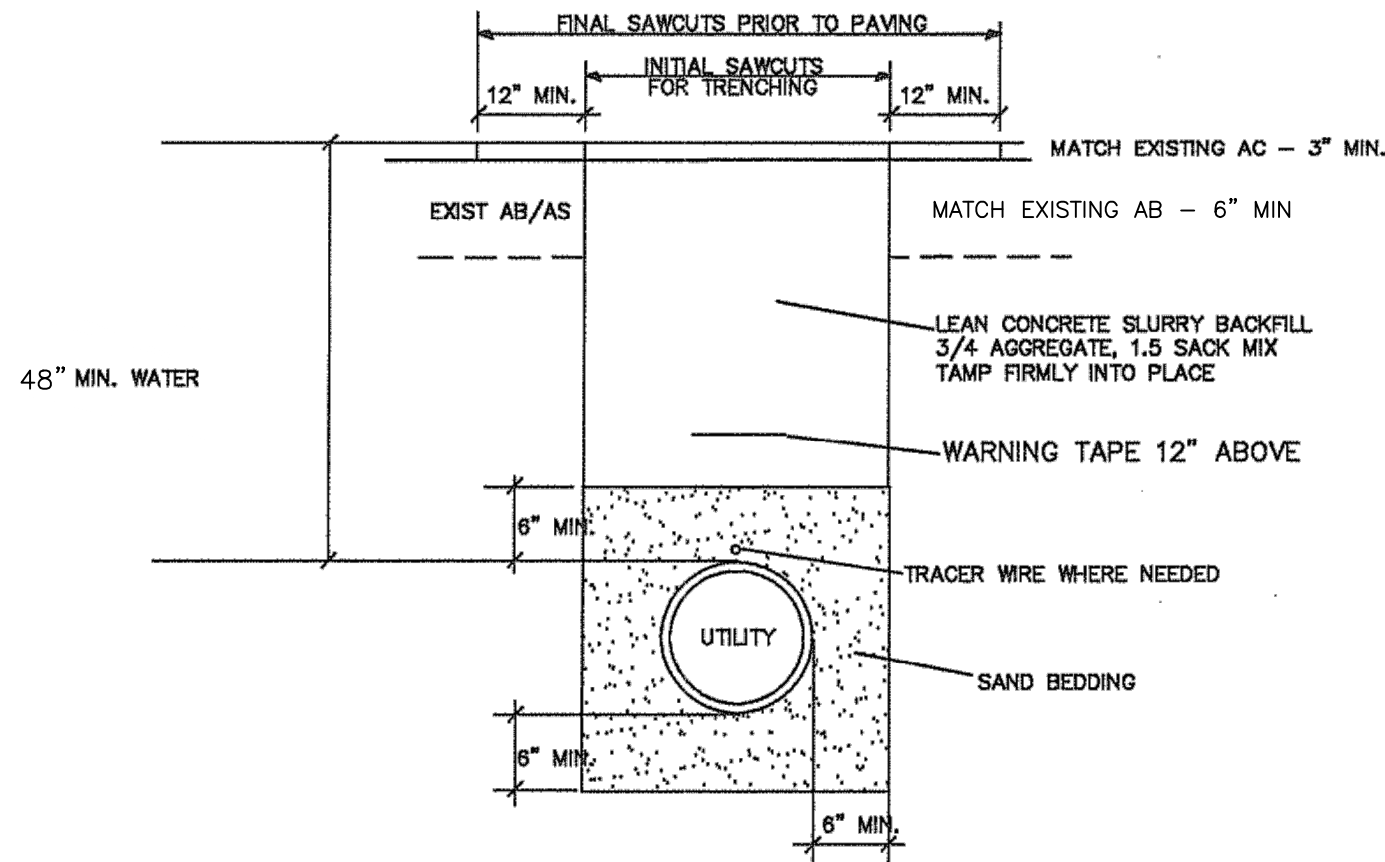
C-204

Plot Date: 4/8/2024 8:59 AM Plotted By: Alex Mustard
Date Created: 4/5/2024 JUB.COM\CENTRAL\CLIENTS\CA\HONEYLAKE\CD\PROJECTS\49-21-079 RAVENDALE\EMANUELE\9-21-079 RAVEN C-501X DETAILS.DWG



- ### NOTES
1. CONTRACTOR TO FURNISH AND INSTALL ALL ITEMS IN LEGEND.
 2. NOT USED.
 3. WATER SERVICE WILL BE INSPECTED AND APPROVED BY OWNER PRIOR TO BACKFILL.
 4. NOT USED.
 5. ANY SUBSTITUTE ITEMS MUST BE SUBMITTED TO THE OWNER FOR APPROVAL PRIOR TO INSTALLATION.
 6. UPC 608.3 REQUIRES WATER HEATER EXPANSION TANKS WHENEVER CHECK VALVES ARE USED IN SERVICES.
 7. CUSTOMER IS RECOMMENDED TO INSTALL A PRV IF MAIN PRESSURE EXCEEDS 80 PSI.
- ### LEGEND
- a. SADDLE - SMITH BLAIR MODEL 317, 1" FIP THREAD
 - b. CORPORATION STOP - FORD FB1101-4-Q-NL, 1" MIP x 1" PEP W/SS INSERT STIFFENER
 - c. 1" POLYETHYLENE PIPE, IPS (PEP, IRON PIPE SIZE), 200 PSI

ALL PART NUMBER REFERENCES TO BE CONSIDERED "OR EQUAL"
VERIFY ALL PART NUMBERS WITH SUPPLIER TO CONFIRM COMPATIBILITY AND/OR NEED FOR ADDITIONAL FITTINGS.



- ### NOTES
1. TO BE USED FOR UTILITY CROSSINGS OF EXISTING STREETS.
 2. LAYOUT OF JOINT TRENCH SITUATIONS MUST BE APPROVED BY CITY.
 3. ASPHALT CONCRETE (A.C.) SHALL CONFORM TO THE PROVISIONS IN SECTION 39 OF THE CALIFORNIA STANDARD SPECIFICATIONS. AGGREGATE FOR A.C. SHALL CONFORM TO THE 1/2" MAXIMUM, MEDIUM GRADING. PAVING SHALL BE PG 64-28. PRIME COAT SHALL BE MC-70 AND SPREAD AT THE RATE OF 0.25 GALLONS PER SQUARE YARD.
 4. AGGREGATE BASE SHALL CONFORM TO THE PROVISIONS IN SECTION 26 OF THE CALIFORNIA STANDARD SPECIFICATIONS.
 5. AGGREGATE SUB BASE SHALL CONFORM TO THE PROVISIONS IN SECTION 25 OF THE CALIFORNIA STANDARD SPECIFICATIONS.
 6. ALL EARTH WORK SHALL CONFORM TO SECTION 19-5 OF THE CALIFORNIA STANDARD SPECIFICATIONS.
 7. DESIGN THICKNESS BASED UPON A MINIMUM "R" VALUE OF EXISTING GRADING = 40. SOILS BELOW R=40 MAY REQUIRE SPECIAL DESIGN PRACTICES, EITHER ADDITIONAL SUBBASE COURSES OR FABRICS.
 8. SS-1 TACK COAT SHALL BE APPLIED AGAINST EXISTING AC AND CONCRETE SURFACES IN ACCORDANCE WITH SECTION 39-4.02.
 9. AN EMULSIFIED ASPHALT FOG SEAL COAT SHALL BE APPLIED AFTER COMPLETION AND ACCEPTANCE OF THE AC IN ACCORDANCE WITH SECTION 37 OF THE CALIFORNIA STANDARD SPECIFICATIONS.



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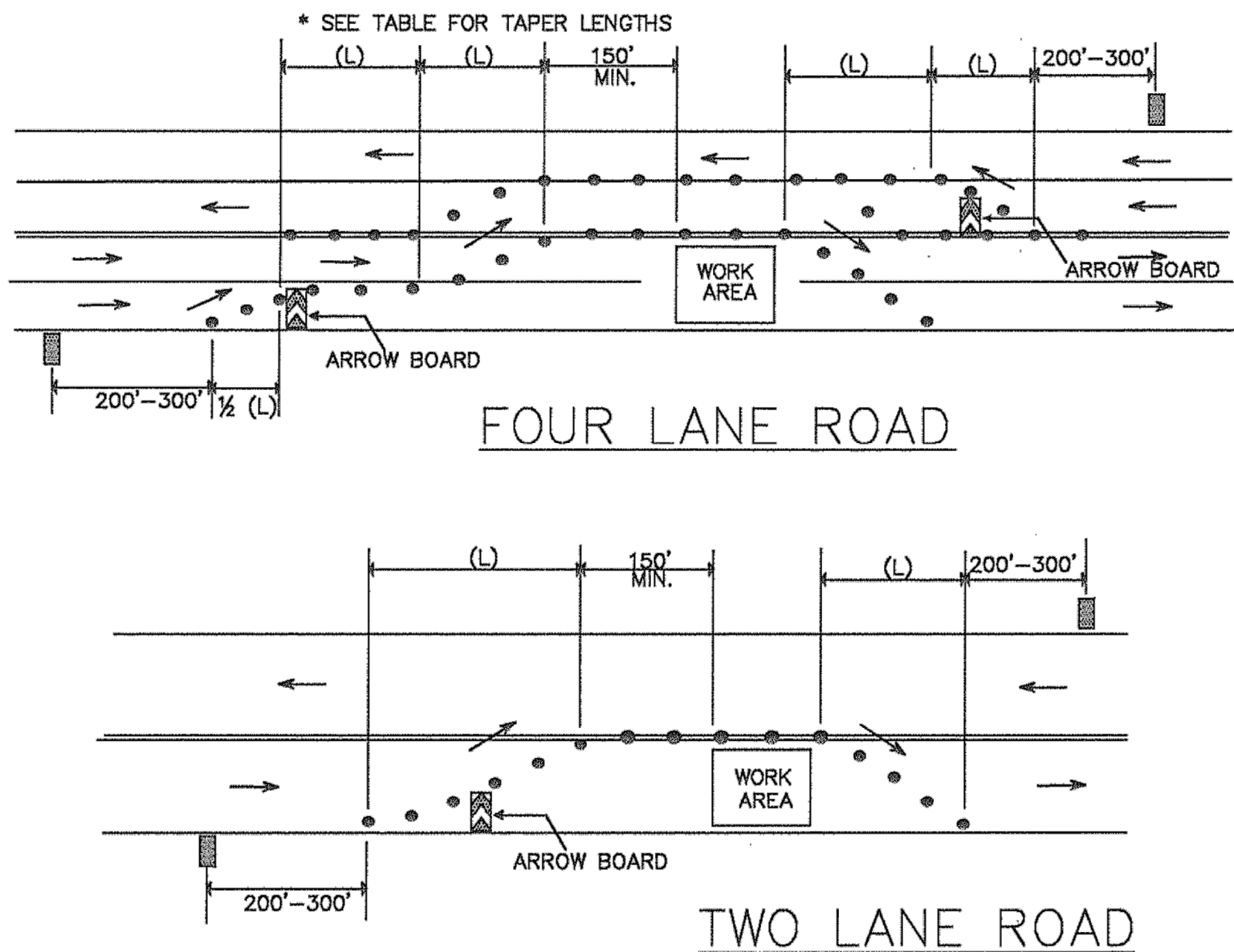


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RECOMMEND USING LATEST METHODOLOGY FROM CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

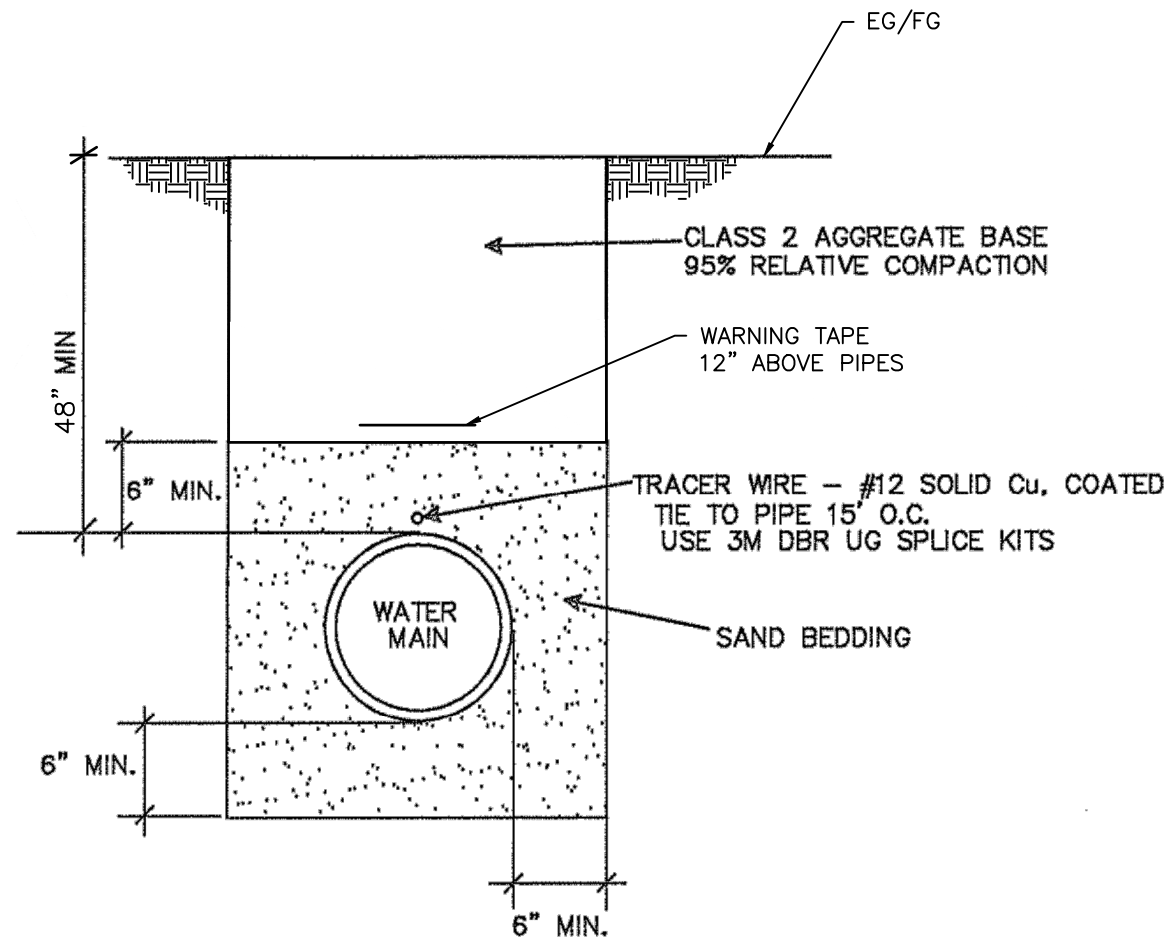


TAPER TABLE			
APPROACH SPEED (MPH)	TAPER LENGTH (L)	CONES PER TAPER	CONE SPACING (FEET)
0-25	125'	6	25
25-40	320'	9	40
45-50	600'	13	50

- ### LEGEND
- WARNING SIGN
 - TRAFFIC CONE
 - DIRECTION OF TRAVEL

- ### NOTES
1. ALL ADVANCED WARNING SIGNS SHALL BE EQUIPPED WITH FLAGS FOR DAYTIME CLOSURES.
 2. PORTABLE DELINEATORS PLACED AT ONE-HALF (1/2) THE SPACING INDICATED FOR TRAFFIC CONES MAY BE USED IN- LIEU OF CONES FOR DAYTIME CLOSURES ONLY.
 3. TRAVEL LANES SHALL BE A MINIMUM OF 10' WIDE.
 4. WARNING SIGNS SHALL BE C23 "ROAD WORK AHEAD" OR C18 "ROAD CONSTRUCTION AHEAD".
 5. FLAGGERS SHALL BE USED IF DEEMED NECESSARY BY THE CITY.

FOR TRENCH CUTS IN EXISTING STREETS USE DETAIL 4, SHEET C-501



- ### NOTES
1. SAND SHALL BE FREE FROM CLAY AND/OR ORGANIC MATERIAL, SUITABLE FOR THE PURPOSE INTENDED, AND AS APPROVED BY THE CITY. SAND SHALL BE OF SUCH SIZE THAT NINETY (90) PERCENT TO ONE HUNDRED (100) PERCENT SHALL PASS A NO. 4 SIEVE, AND NOT MORE THAN FIVE (5) PERCENT WILL PASS A NO. 200 SIEVE.
 2. AGGREGATE BASE MATERIAL SHALL CONFORM TO SECTION 26 OF THE CALIFORNIA STANDARD SPECIFICATIONS. THE BASE SHALL BE 1" MAXIMUM GRADING. BASE MATERIAL SHALL BE BROUGHT UP IN MOISTENED LAYERS NOT TO EXCEED 6" AND COMPACTED BY MECHANICAL MEANS TO 95% RELATIVE MAXIMUM DENSITY.
 3. WATER PIPE SHALL BE C-900, C-905 UNLESS OTHERWISE REQUIRED OR ALLOWED BY CITY. INSTALLATION SHALL BE IN ACCORDANCE WITH PIPE MANUFACTURER'S INSTRUCTIONS.
 4. LANE CLOSURES SHALL CONFORM TO CITY STANDARD DETAIL 2, SHEET C-502.
 5. INSPECTION IS REQUIRED AT TIME PIPE IS LAID AND PRIOR TO INSTALLATION OF ASPHALT. A FINAL INSPECTION SHALL BE PERFORMED AFTER PLACEMENT OF ASPHALT.
 6. PROVIDE 12" MINIMUM SEPARATION W/CROSSING SANITARY SEWERS; SS JOINTS TO BE 10' FROM CROSSING POINT.
 7. DISINFECTION: USE MINIMUM OF 2 CHLORINE TABLETS PER 20' LENGTH; GLUE WITH PERMETEX 800-11 SEALANT.
 8. NOT USED.
 9. WATER MAINS SHALL BE SEPARATED A MINIMUM OF 10 FEET HORIZONTALLY WHEN RUN PARALLEL (SIDE OF PIPE TO SIDE OF PIPE). FOR CROSSINGS, WATER MAINS SHALL BE A MINIMUM OF 1-FOOT ABOVE SEWER MAINS. IF SITUATION DICTATES, ALTERNATE CRITERIA AS APPROVED BY THE STATE DHS SHALL BE USED.

RAVENDALE WATER SYSTEM IMPROVEMENTS
LASSEN COUNTY, CALIFORNIA

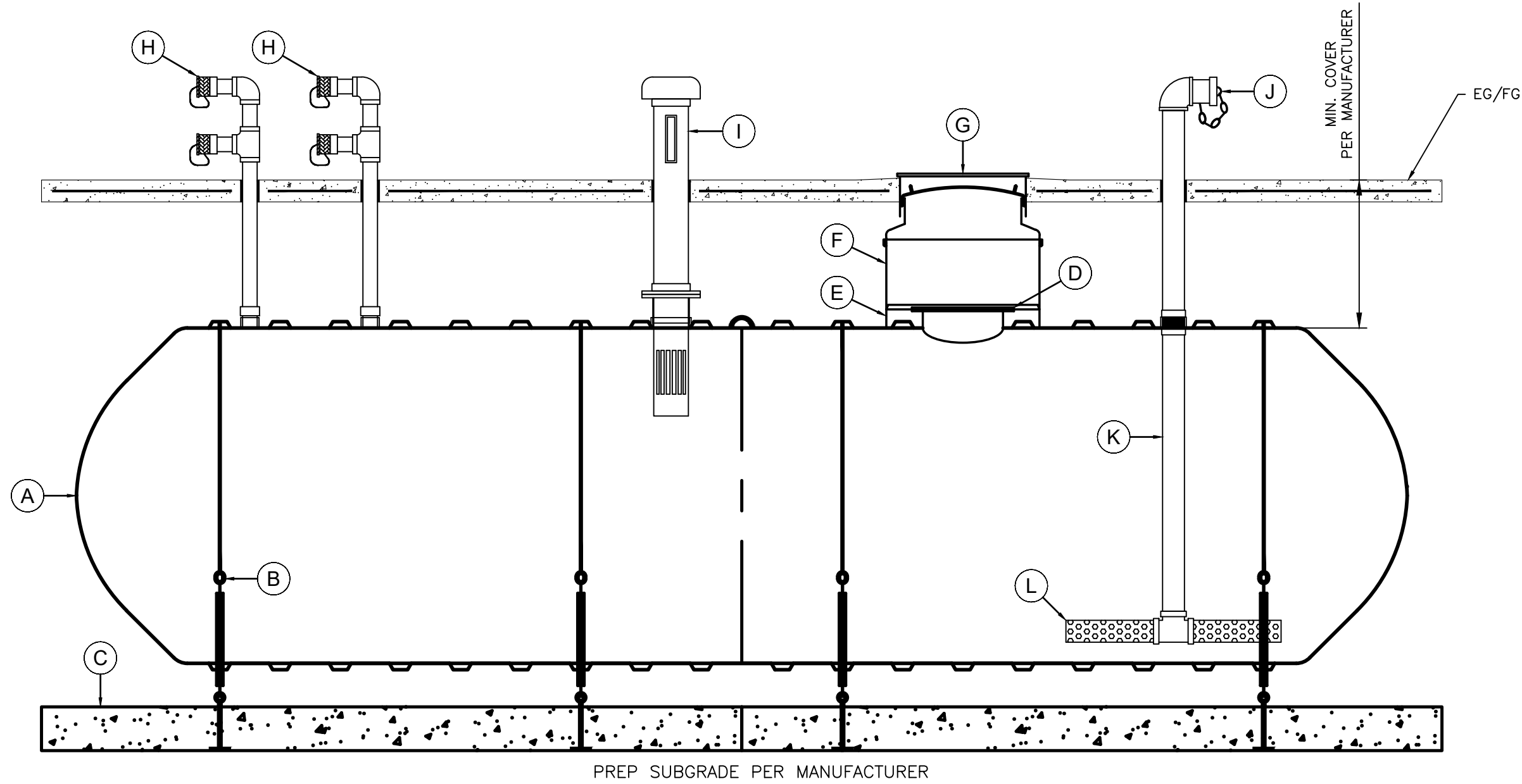
DETAILS

FILE: 49-21-079 RAVEN C-501X DETAILS
JUB PROJ. #: ---
DRAWN BY: ---
DESIGN BY: ---
CHECKED BY: ---
ONE INCH
AT FULL SIZE, IF NOT ONE INCH SCALE ACCORDINGLY
LAST UPDATED: 4/5/2024
SHEET NUMBER:

C-501

Plot Date: 4/8/2024 8:59 AM Plotted By: Alex Mastard
Date Created: 4/5/2024 JUB.COM\CENTRAL\CLIENTS\CA\HONEYLAKE\CD\PROJECTS\49-21-079 RAVENDALE\MADELINE\DESIGN\CD\SHEET RAVENDALE\49-21-079 RAVEN C-501X DETAILS.DWG

MARK	EQUIPMENT LISTING AND SUPPLIER	CSI	CUSTOMER	MARK	EQUIPMENT LISTING AND SUPPLIER	CSI	CUSTOMER
A	C.S.I. SINGLE WALL FIBERGLASS TANK	X		G	36" DIAMETER MANHOLE AND COVER		X
B	C.S.I. FRP HOLD DOWN STRAP & TURNBUCKLE ASSEMBLY	X		H	4" NPT FTG w/ DUAL NST FILL OR RECIRCULATING POINTS	X	
C	C.S.I. PRECAST DEADMAN ANCHOR WITH EYEBOLTS	X		I	10" NPT FITTING WITH VENT/LEVEL INDICATOR ASSEMBLY	X	
D	22" FRP FLANGED MANWAY	X		J	6" DRY HYDRANT CONNECTION ASSEMBLY	X	
E	42" ATTACHED CONTAINMENT COLLAR	X		K	6" FULL NPT FTG w/ 6" FRP SUCTION TUBE	X	
F	42" TANK SUMP WITH 32" I.D. OPENING	X		L	DRY HYDRANT STRAINER ASSEMBLY	X	

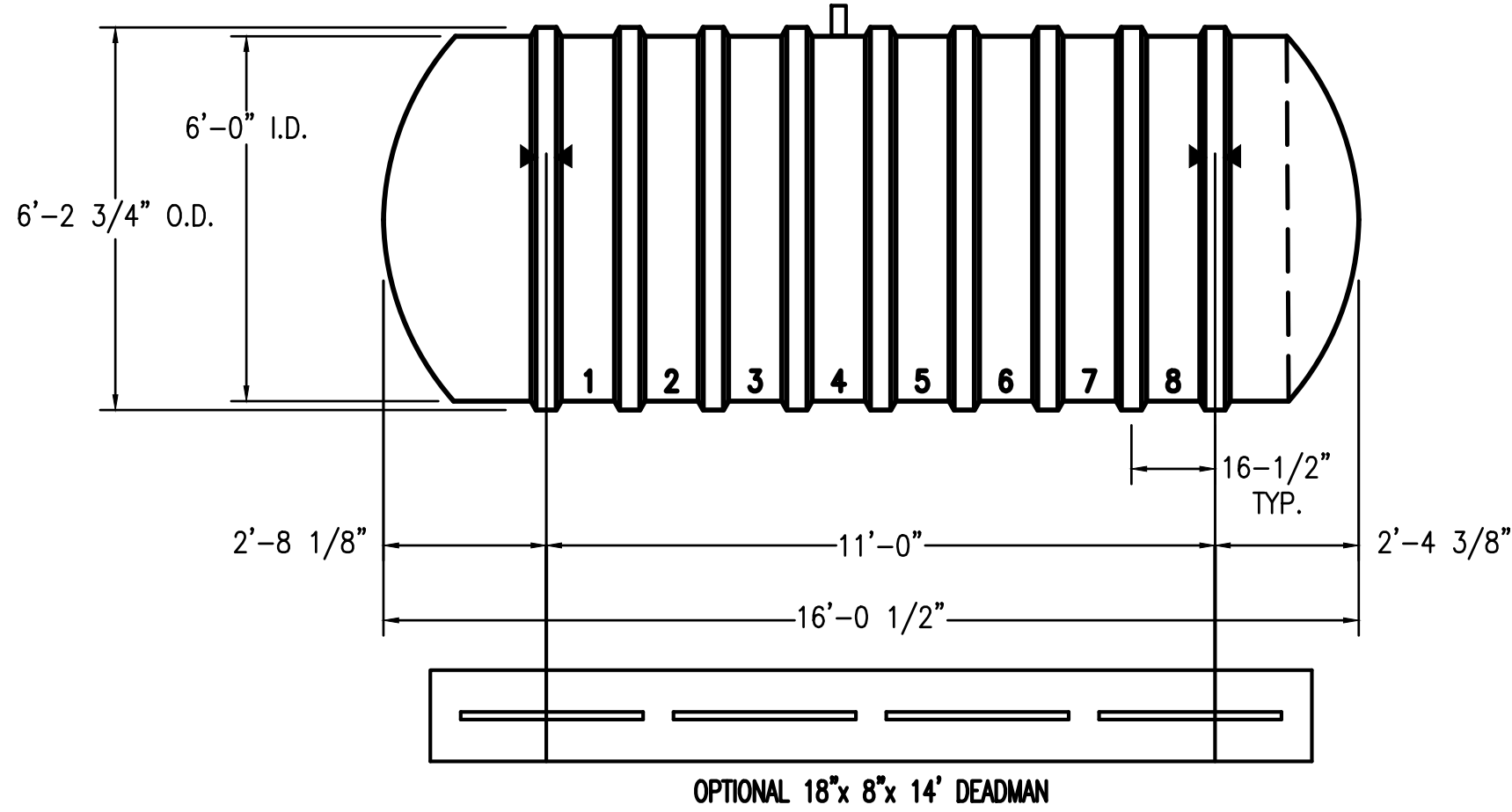


1

FIRE WATER STORAGE CISTERN DETAIL

SCALE: NTS

SHELL CODES: 1-E6S09SD, 1-E6SECSO



NOTES:

- HOLD DOWN STRAP CLIP
- HOLD DOWN STRAP LOCATION
- TYPE "13" LIFT LUG - SD
- TYPE "13" LIFT LUG - HD



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RAVENDALE WATER SYSTEM IMPROVEMENTS
LASSEN COUNTY, CALIFORNIA

DETAILS

FILE: 49-21-079_RAVEN_C-501X_DETAILS

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SHEET NUMBER:

C-502

Attachment III
USFWS IPaC Report

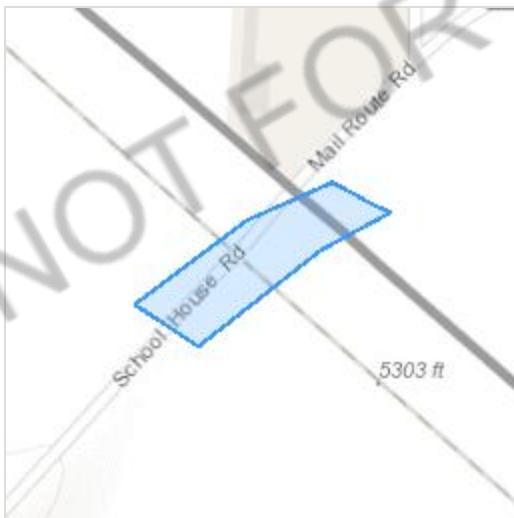
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Lassen County, California



Local office

Reno Fish And Wildlife Office

☎ (775) 861-6300

📅 (775) 861-6301

1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Reptiles

NAME	STATUS
Northwestern Pond Turtle <i>Actinemys marmorata</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found There is proposed critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

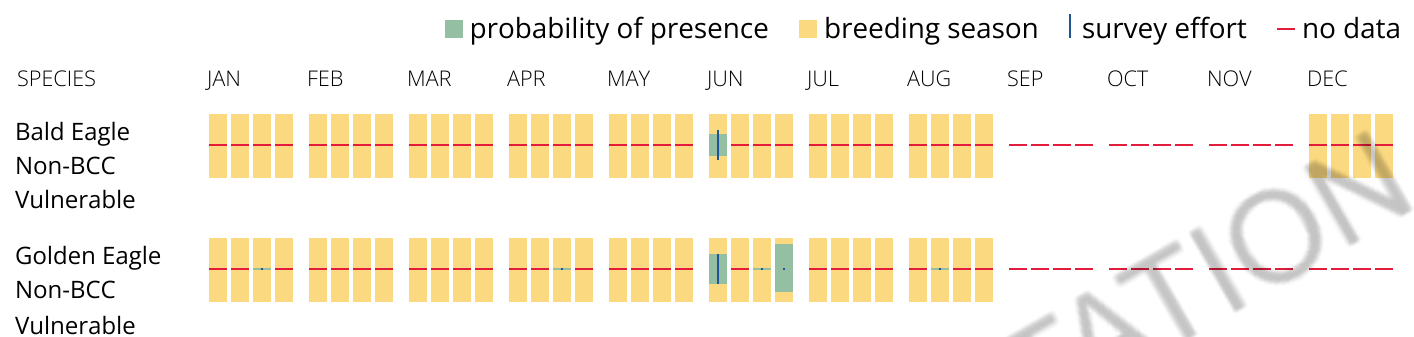
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Northern Harrier <i>Circus hudsonius</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Sage Thrasher <i>Oreoscoptes montanus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9433	Breeds Apr 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey

effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

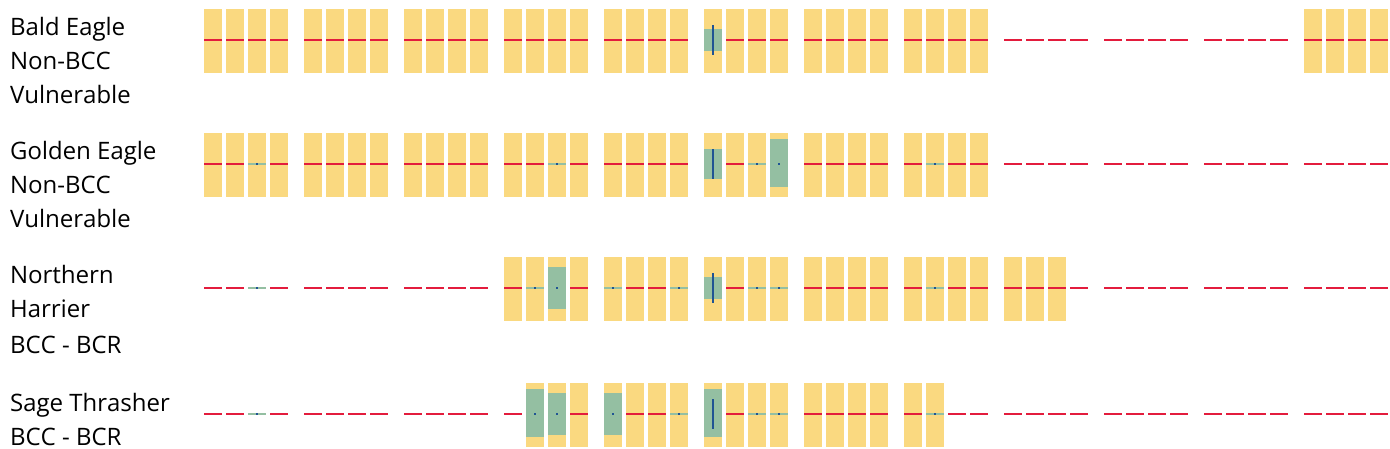
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.