County of Santa Cruz

DEPARTMENT OF COMMUNITY DEVELOPMENT AND INFRASTRUCTURE

701 OCEAN STREET, FOURTH FLOOR, SANTA CRUZ, CA 95060-4070
Planning (831) 454-2580 Public Works (831) 454-2160

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Staff Report
Riparian Exception Permit and Conditioned Biotic Approval
Level 3 – Administrative Review

Project Name: Rodeo Gulch Sewer and Pump Station Rehabilitation Project

APN/Site Address: Santa Cruz County Sanitation District Easements on the following parcels: 028-361-17, 028-361-16, 028-361-29, 029-121-02, 029-121-01, 025-202-38, 025-202-39, 025-202-40, 025-202-33, 025-202-37, 025-202-30, 025-202-17, 025-251-33, 028-081-25, 028-081-10, 028-361-18, 028-081-05, 028-081-04, 028-081-11, 028-081-12, 028-021-07, 029-261-01, 029-391-03, 029-031-11, 029-391-02, 029-391-09, 029-061-19, 029-061-46, 029-061-45, 029-061-44, 029-061-43, 029-061-42, 029-061-41, 029-341-02, 029-061-48, 029-061-55, 029-061-56, 029-341-01, 029-031-05, 025-211-02, 029-391-04, 029-391-01, 025-211-06, 029-031-06, 029-031-14, 029-061-53, 029-061-62, 029-061-54, 029-061-57, 029-061-61, 025-202-25, 025-202-24, 025-202-23, 025-202-36, 025-202-02, 025-202-18, 030-112-09, 029-261-03, 030-112-10

DPW Project #s: P53802, P53827, P53876

Project Location: The project is approximately 1.5 miles long and includes two separate sewer sections: The upper section runs parallel to Rodeo Gulch Creek from Soquel Drive to just north of Capitola Road; the lower section runs mostly along surface streets from a private road (APN 028-021-07) to the Rodeo Pump Station on Richmond Drive.

Applicant/Owner: Santa Cruz County Sanitation District, Attn: Ashleigh Trujillo

Attachments: **Attachment A.** Biotic Report
Attachment B. CEQA NOE

The Department of Community Development and Infrastructure - Planning received and reviewed a Biological Resources Report dated November 30, 2022, prepared by Denise Duffy & Associates, Inc. on behalf of the Santa Cruz County Sanitation District (SCCSD) for the Rodeo Gulch Sewer and Pump Station Rehabilitation Project. This report is included as Attachment A. The Biotic Report Review was required because of the potential for sensitive habitats and protected species in the disturbance area for this project where construction activities associated with rehabilitation of existing sewer pipe is proposed. In addition, portions of the proposed project are located within the riparian corridor of Rodeo Gulch Creek and authorization of a Riparian Exception by the Planning Division is required.

The summary and evaluation below are based on information obtained through review of the attached Biological Resources Report and confirmed through field observations made during a site visit on September 12, 2022 by County Environmental Planning Staff. Other sources consulted during report review included the California Natural Diversity Data Base (CNDDB), the California Wildlife Habitat Relationships (CWHR) information system, the USFWS Environmental Online Conservation System (ECOS), Santa Cruz County GIS Maps, aerial imagery of the project site, and personal communications between the County staff biologist and SCCSD Staff.

Project Description

The proposed project involves rehabilitating portions of an existing sewer main (Rodeo Gulch trunkline), repair of a steel trestle pipe bridge, and installation of an auxiliary wet well at the existing Rodeo Pump Station. The Rodeo Gulch trunkline collects wastewater from surrounding development and conveys it to the Rodeo Pump Station located on Richmond Drive. The trunkline includes a short segment of pipe supported by a steel bridge spanning approximately 144 feet across an ephemeral drainage. Analysis of the existing sewer system indicates that structural defects in pipes, joints, manholes and other connections caused by age and deterioration, allow excessive stormwater infiltration into the system and allow wastewater to seep out of the system and into the soil. Excessive stormwater infiltration causes wet weather flows to exceed and overload the system's capacity and increases the costs for pumping and treating wastewater. The steel trestle pipe bridge has damaged steel frame members that require replacement and deteriorated paint that needs to be rehabilitated to prevent further damage to the structure.

The project will address these issues by rehabilitating two deteriorated sections of the Rodeo Gulch Trunkline, repairing and rehabilitating the existing pipe bridge, and upgrading the existing pump station through installation of a new wet well. The pipeline will be rehabilitated using trenchless methods wherever possible (CIPP lining) and conventional (open cut) trenching methods where trenchless methods cannot be used.

CIPP lining is a trenchless method of rehabilitating underground pipes that minimizes excavation and decreases potential construction impacts. This method involves inserting and pulling a resin-impregnated fabric liner through an existing pipe and inflating it using water, steam, or air. As the resin cures, it forms a tight-fitting, jointless, and corrosion-resistant structural liner within the existing pipe. The work requires an area approximately 40-feet in diameter around each manhole where the lining equipment will be operated from.

Conventional open cut trenching requires digging a trench approximately five feet wide and as deep as existing pipe to remove and replace existing pipe. Construction activities including temporary stockpiling and removal and replacement of pipe occur within an approximate 10 to 15-foot-wide construction corridor. Once installed, the trench is backfilled, and the disturbance area restored to pre-construction conditions (either re-paved or re-vegetated).

Work on the existing sewer line requires a bypassing system to keep the system flowing during construction. Bypassing consists of placing a temporary pump in an upstream manhole. The pump discharges into a 6 to 8-inch flexible temporary pipe laying on the ground surface near the existing trunkline alignment and conveys sewer flows around the work area to a downstream manhole. The temporary pipe is moved into position by hand or using a light utility terrain vehicle and removed upon project completion.

Access for construction, including placement and alignment of the temporary bypass pipe, will occur along existing access routes that are used for routine inspection and maintenance of the sewer system and manholes. Vegetation encroaching in these areas is regularly mowed and trimmed as needed to maintain access for maintenance crews.

Soil material excavated during construction will be temporarily stockpiled in existing developed or disturbed areas or trucked off site. Equipment staging areas have been identified in existing developed or previously disturbed areas consisting of ruderal and/or non-native grassland habitat.

The Upper Rodeo Gulch Trunkline section also includes repair of an existing steel trestle bridge supporting a short segment of pipe over an ephemeral tributary to Rodeo Gulch Creek. Anticipated bridge rehabilitation work includes removing the existing paint by sandblasting, repainting, and repairing or replacing damaged steel frame members. Repair work will be performed from conventional scaffolding with the metal pads placed on the ground or on wood blocking adjacent to the structure. Sandblasting tarps, or other containment screens, will be installed on the scaffolding, bridge, and ground to contain any debris related to the work.

The work will be implemented as three separate construction projects: The Upper Rodeo Gulch Trunkline Rehabilitation Project, the Lower Rodeo Gulch Trunkline Replacement Project, and the Rodeo Pump Station Capacity Upgrade Project.

Santa Cruz County Planning determined that the Rodeo Gulch Sewer and Pump Station Rehabilitation Project is Categorically Exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to §15301 (b)(d) Class 1 as it involves the maintenance and repair of existing sewer infrastructure for the purpose of rehabilitating and maintaining public facilities and involves no expansion of the existing use. None of the exceptions in §15300.2 apply. The CEQA NOE is included as Attachment B.

Baseline Environmental Conditions

The Study Area covered in the Biological Report consists of the proposed impact area of the entire project alignment plus a buffer of approximately 25 feet to evaluate potential impacts to surrounding habitat.

The Biological Report identifies four distinct habitat types in the Study Area: arroyo willow riparian, coast live oak woodland, non-native grassland, and ruderal.

Approximately 0.76 acres of arroyo willow riparian habitat occurs along the Upper Rodeo Gulch portion of the project site, where it is supported by Rodeo Gulch Creek. Along the creek banks, the riparian canopy is dense and dominated by arroyo willow, Fremont cottonwood, western sycamore, and American dogwood trees. The understory in these areas is dominated by a mixture of native and non-native herbs and shrubs including California blackberry, Himalayan blackberry, sedges, English ivy, and poison oak. An ephemeral tributary to Rodeo Gulch Creek traverses the study area beneath the pipe bridge proposed for rehabilitation. This drainage channel conveys seasonal urban runoff from an existing storm drain pipe and surface water is only present during heavy rain events. The channel is dominated by arroyo willow riparian habitat that is contiguous with the Rodeo Gulch riparian corridor.

Approximately 0.47 acre of coast live oak woodland was mapped within the study area. The overstory is dominated by a canopy of mature live oaks and the understory is dominated by a mix of native and non-native annual grasses and forbs. Additional areas dominated by oak woodland habitat, consistent with this description, were included in the mapped arroyo willow riparian habitat in the Biological Report due to their proximity to the creek and likely dependence upon subsurface hydrology. Vegetative characteristics in these areas area consistent with the coast live oak woodland described here but they were labeled and mapped as arroyo willow riparian habitat in the Biological Report.

Approximately 2.11 acres of non-native grassland habitat dominated by wild oat and ripgut brome was mapped within the study area in small patches within the upper portion of the project site. Approximately 2.28 acres of sparsely vegetated ruderal habitat were identified throughout the study area. These areas have been disturbed by previous development or otherwise subjected to historic and ongoing human disturbance and are devoid of vegetation or dominated by non-native and/or invasive weed species.

Analysis

Portions of the project alignment occur within and immediately adjacent to the riparian corridor of Rodeo Gulch Creek and within areas of Coast Live Oak Woodland.

The study area contains potential habitat for the following California Department of Fish and Wildlife Species of Special Concern (SSC): Pallid bat, Townsend's big-eared bat, San Francisco dusky-footed woodrat, Santa Cruz black salamander, California giant salamander, and western pond turtle. Habitat for Federal Endangered tidewater goby and Federally designated Critical Habitat for this species occurs in lower Rodeo Gulch Creek and Corcoran Lagoon located adjacent to the Study Area at Lower Rodeo Trunkline and the Rodeo Pump Station.

The Study Area also contains potential habitat for nesting birds. Birds of prey and migratory birds are protected under the California Fish and Game Code, and the Federal Migratory Bird Treaty Act (MBTA). Under the MBTA, it is "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird unless and except as permitted by regulations.

Oak Woodlands, Streams, wetlands, and riparian corridors (as defined by Santa Cruz County Code Section 16.30.030), and habitat for special-status species are considered sensitive under Santa Cruz County's Sensitive Habitat Protection ordinance (Chapter 16.32). Streams, wetlands, and their riparian corridors are also granted special protections under the County's Riparian Corridor and Wetlands Protection ordinances (Chapter 16.30). Lands extending 100 feet from the high-water mark of a lake, wetland, estuary, lagoon or natural body of standing water, lands extending 30 feet out from each side of an intermittent stream, lands extending 50 feet out from each side of a perennial stream, and lands containing a riparian woodland are considered Riparian Corridors. Development activities are prohibited within Riparian Corridors unless Riparian Exception Findings (SCCC 16.30.060) are met, and a Riparian Exception is approved by County Planning.

Streams are also regulated under the Clean Water Act Section 404 by U. S. Army Corps of Engineers (USACE), and Section 401 by the Regional Water Quality Control Board (RWQCB). The associated banks of the drainage are regulated under California Fish and Game Code Section 1602 and may be subject to regulation under the Porter-Cologne Water Quality Act as "Waters of the State".

Impacts - Upper Rodeo Gulch Trunkline

The Upper Rodeo Gulch Trunkline section runs along the edge of existing developed areas parallel to Rodeo Gulch Creek skirting the outer edge of the riparian corridor for most of its alignment. The existing pipe throughout most of this section will be rehabilitated using CIPP lining. Impacts are minimal and associated with limited work areas (approximately 40-feet in diameter) situated around select existing manholes and vehicular access along existing access routes. These manholes and access areas are located within previously disturbed areas, non-native grasslands, and areas with grasses and forbs that occur beneath a canopy of scattered oaks at the edge of the riparian corridor. Disturbance to sensitive habitats will not result from this work. Conditions have been included below to ensure that impacts to oaks in oak woodland will be avoided during this work.

Two small segments of the Upper Rodeo Gulch Trunkline (approximately 290 linear feet) will be replaced using conventional open cut trenching. These segments are located in previously disturbed ruderal areas. This work will result in removal of a single non-native eucalyptus tree. Impacts to sensitive habitats will not result from this work.

Work associated with repair of the existing steel trestle bridge will occur within the riparian corridor of an ephemeral drainage. Access to the bridge and staging for the bridge work will be from ruderal habitat on the south side of the bridge. One multi-stemmed coast live oak tree with a dbh of 45 inches is proposed for removal as part of the bridge work. This tree is growing directly adjacent to the bridge on the north bank and one large branch trunk of this tree is leaning toward the bridge. Sanitation District Staff has expressed concern that this creates a potentially hazardous situation because the leaning branch could fall and damage the bridge. Conditions are included below for avoidance of this tree if possible, and compensation through replacement planting for unavoidable removal. An arborist must be consulted to determine if complete removal of this tree can be avoided through alternative options that would simultaneously protect the integrity of the existing bridge and surrounding development.

Bridge work will also require clearing and grubbing approximately 10-15 feet of brush on each side of the bridge for access and placement of temporary scaffolding. This area consists mostly of poison oak, blackberry, and willow saplings. Bridge work will be performed during dry periods when stormwater in the ephemeral drainage is not likely. Scaffolding will be erected by hand and no heavy equipment will enter the channel. Conditions are included below requiring minimization of impacts to riparian vegetation, restoration of disturbed areas, and a Containment Plan to prevent hazardous materials from entering the ephemeral tributary and surrounding riparian habitat.

Impacts - Lower Rodeo Trunkline

The Lower Rodeo Gulch Trunkline section runs almost entirely along paved surface streets from a private road in a mobile home park (APN 028-021-07) through an existing neighborhood to the Rodeo Pump Station. This section of pipe will be replaced using conventional open cut trenching and roads will be repaved following construction. Disturbance to sensitive habitats will not result from this work. Three small native trees and two non-native acacia trees will require removal as part of this work. Conditions are included below requiring replacement of these trees.

Impacts - Rodeo Pump Station Capacity Upgrade

At the existing Rodeo Pump Station, a new underground auxiliary wet well will be constructed within an existing paved/gravel lot adjacent to the existing wet well. This work includes excavation of soil and installation of a large underground concrete structure and associated pipes and equipment required to connect the well to the existing pump station. Once the underground structure and piping has been installed, the area will be backfilled and resurfaced with gravel, concrete, or pavement. This work will not result in impacts to sensitive habitat.

Conclusion

The completed project will result in improvements to an underground sewer system and will not change existing above-ground conditions. The project will not reduce or adversely impact the riparian corridor. No permanent impacts will occur. The project will result in negligible temporary impacts to the riparian corridor for construction access and all areas temporarily disturbed during construction will be restored to pre-project conditions or better upon project completion.

Direct impacts to special-status species are not expected to result from project implementation. Conditions have been included below to ensure that disturbance to special-status species and other wildlife is avoided to the maximum extent possible.

The project proposes to remove seven trees including three non-native invasive species and one large multi-trunk oak tree. This tree loss may result in indirect impacts to nesting birds and roosting bats through habitat loss. Conditions have been included below to ensure that direct impacts are avoided, and that loss of habitat is compensated for through adequate tree replacement. Because of the abundance of habitat in the nearby riparian corridor, tree removal is not expected to result in significant impacts to any species through temporal loss of habitat while replacement trees mature.

There are biotic constraints on the project site associated with sensitive habitats, special-status species, riparian habitat, and habitat for nesting birds that must be considered during project implementation.

Project implementation is contingent upon compliance with the Conditions of Approval included below.

Staff Recommendation

The Planning Department has taken administrative action on your application as follows:

_____ Approved without conditions (if not appealed).
__X__ Approved with conditions (if not appealed).
_____ Denied (based on the attached findings).

NOTE: This decision is final unless appealed in accordance with Section 18.10.300 et seq of the Santa Cruz County Code.

Report Prepared By: _____

Juliette Robinson, Resource Planner IV
Santa Cruz County Planning
701 Ocean Street, 4th Floor
Santa Cruz CA 95060

Upper Rodeo Gulch Trunkline Rehabilitation Project
Lower Rodeo Gulch Trunkline Replacement Project
Rodeo Pump Station Capacity Upgrade Project

Riparian Exception Findings

1. That there are special circumstances or conditions affecting the property.

The proposed project will rehabilitate deteriorated portions of an existing public sewer system in place. Continued deterioration of sewer pipes may result in failure of the system and put the surrounding residential and riparian areas at risk of contamination. Maintenance and rehabilitation of the system is necessary for continued function.

2. That the exception is necessary for the proper design and function of some permitted or existing activity on the property.

The proposed project is the rehabilitation and maintenance of an existing public sewer system. Repair and stabilization of the sewer infrastructure that currently exists parallel to and within the Rodeo Gulch Riparian Corridor is necessary to ensure continued function of the public sewer system.

3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located.

The exception will benefit the local community by allowing improvements to existing sewer system infrastructure. The proposed project is designed to repair and arrest the continued deterioration of existing sewer infrastructure and will be beneficial to downstream water quality.

4. That the granting of the exception, in the Coastal Zone, will not reduce or adversely impact the riparian corridor, and there is no feasible less environmentally damaging alternative.

The project will not reduce or adversely impact the riparian corridor. No permanent impacts will occur. The project will result in negligible temporary impacts to the riparian corridor for construction access and all areas temporarily disturbed during construction activity will be restored to pre-project conditions or better upon project completion.

5. That the granting of the exception is in accordance with the purpose of this chapter, and with the objectives of the General Plan and elements thereof, and the Local Coastal Program Land Use Plan.

The granting of the exception is in accordance with the purpose of the Riparian Corridor and Wetlands Protection Ordinance, and with the objectives of the General Plan. The project has been designed to minimize impacts to the riparian corridor and sensitive habitat as defined in the Santa Cruz County Code Sections 16.30 and 16.32 to the maximum practicable extent. Disturbed areas in and adjacent to the riparian corridor shall be restored to pre-project or better conditions by re-vegetating with native vegetation.

County of Santa Cruz

DEPARTMENT OF COMMUNITY DEVELOPMENT AND INFRASTRUCTURE

701 OCEAN STREET, FOURTH FLOOR, SANTA CRUZ, CA 95060-4070
Planning (831) 454-2580 Public Works (831) 454-2160

Upper Rodeo Gulch Trunkline Rehabilitation Project
Lower Rodeo Gulch Trunkline Replacement Project
Rodeo Pump Station Capacity Upgrade Project

Conditioned Riparian Exception and Biotic Approval

Your Riparian Exception has been administratively approved by the Department of Community Development & Infrastructure - Planning Division. The Conditions of Approval included below are the terms under which your project can proceed.

In order to validate this approval, you must sign the permit, affirming that you have reviewed the permit and agree to the conditions imposed by it. Until this occurs, the permit is not active. By signing this permit below, the owner(s) agree(s) to accept the terms and conditions of this permit and to accept responsibility for payment of the cost for inspection and all other action related to noncompliance with the permit conditions. This permit is null and void in the absence of the required signature(s) below.

Application Approved By: **1/4/2023**

Juliette Robinson, Resource Planner IV — Date
Santa Cruz County Planning
701 Ocean Street, 4th Floor
Santa Cruz CA 95060

Signature of Owner/Agent: DocuSigned by: 1/19/2023

628D647137C44D4...

Santa Cruz County Sanitation District — Date
Attn: Ashleigh Trujillo
701 Ocean St., Room 410
Santa Cruz, CA 95060

Please contact Juliette Robinson at (831) 454-3156 or Juliette.Robinson@santacruzcounty.us should you have questions about this report.

In accordance with Chapter 18.10 of the County Code, minor variations to this permit which do not affect the overall concept, intensity, or density may be approved by the Planning Director at the request of the applicant or staff.

Please note: This permit expires three years from the effective date listed below unless the conditions of approval are complied with and the project commences before the expiration date.

Approval Date: 1/4/2023	Effective Date: 1/4/2023	Expiration date: 1/4/2026

Conditions of Approval

I. This permit authorizes the Santa Cruz County Sanitation District to exercise a Minor Riparian Exception for the Rodeo Gulch Sewer and Pump Station Rehabilitation Project which includes work associated with the Upper Rodeo Gulch Trunkline Rehabilitation Project, the Lower Rodeo Gulch Trunkline Replacement Project, and the Rodeo Pump Station Capacity Upgrade Project.

II. Prior to exercising any rights granted by the permit including, without limitation, any occupancy, construction, or site disturbance, the applicant/owner shall:

A. Sign, date, and return to the Planning Division one copy of this approval to indicate acceptance and agreement with the conditions thereof.

B. Obtain all necessary approvals and/or permits from the appropriate regulatory agencies which may include the United States Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), and the United States Fish and Wildlife Service (USFWS).

III. Operational Conditions

A. The Santa Cruz County Sanitation District is responsible for complying with all measures and conditions included in approvals and permits obtained from County Planning, the USACE, RWQCB, NMFS, CDFW, and USFWS.

B. To minimize impacts to sensitive habitats and special-status species the following conditions shall be adhered to:

1. Temporary scaffolding for the bridge rehabilitation shall be erected by hand and no heavy equipment shall enter the channel.

2. Recommended Measures Bio-1 through Bio-17 in the attached Biological Resources Report dated November 30, 2022 prepared by Denise Duffy & Associates, Inc. shall be adhered to.

3. Oak trees to be retained shall be protected at or outside the dripline to the maximum extent possible and marked for avoidance with flagging or fencing if necessary. The area within the drip line of oak trees shall be considered sensitive habitat and avoided to the extent feasible. The exact locations of the protection measures shall be determined in the field with the assistance of a qualified arborist or biologist as outlined in recommended measure BIO-4. No prolonged vehicular parking or equipment staging is permitted within the drip line of existing oak trees. If avoidance of work beneath oaks is not possible, the project biologist/arborist will work with the County Environmental Coordinator and the contractor to minimize impacts and ensure any unavoidable impacts to the health of existing oak trees are addressed prior to the completion of the project.

4. A qualified arborist shall be consulted to determine the health of the large multi-trunked oak tree near the northeast abutment of the pipe bridge and risk of failure that might damage the bridge. The arborist shall evaluate if the tree poses a hazard to the bridge and determine if complete removal of this tree can be avoided through alternative options that would also protect the integrity of the existing bridge and surrounding development.

    a. A memo outlining the results of this analysis shall be submitted to the County Environmental Coordinator for review and approval prior to removal of the tree.

5. The requirements of BIO-16 c in the attached Biological Resources Report shall be modified and the following adhered to:

    a. All native trees removed shall be replaced in-kind (or with equivalent native tree species appropriate to the surrounding habitat) at a minimum 3:1 ratio. Non-native trees removed shall be replaced at a minimum 3:1 ratio by native tree species appropriate to the surrounding habitat.

    b. If removal of the large multi-trunk oak tree cannot be avoided, this tree shall be replaced on site or at a nearby location by six coast live oak trees of three different sizes (i.e. 2-one gallon, 2-five gallon, 2-fifteen gallon).

    c. All replacement plantings shall be included in the required Habitat Restoration Plan outlined in BIO-16 of the attached Biological Resources Report.

Rodeo Gulch Sewer Replacement Project
Biological Resources Report

Report Preparation Date November 30, 2022

County of Santa Cruz Application Number P53802, P53827, P53876

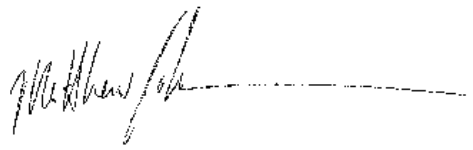
Assessor Parcel Numbers 028-361-17 028-361-16 028-361-29 029-121-02
029-121-01 025-202-38 025-202-39 025-202-40
025-202-33 025-202-37 025-202-30 025-202-17
025-251-33 028-081-25 028-081-10 028-361-18
028-081-05 028-081-04 028-081-11 028-081-12
028-021-07 029-261-01 029-391-03 029-031-11
029-391-02 029-391-09 029-061-19 029-061-46
029-061-45 029-061-44 029-061-43 029-061-42
029-061-41 029-341-02 029-061-48 029-061-55
029-061-56 029-341-01 029-031-05 025-211-02
029-391-04 029-391-01 025-211-06 029-031-06
029-031-14 029-061-53 029-061-62 029-061-54
029-061-57 029-061-61 025-202-25 025-202-24
025-202-23 025-202-36 025-202-02 025-202-18
030-112-09 029-261-03 030-112-10

Physical Address N/A

Applicant Santa Cruz County Sanitation District
Attn: Ashleigh Trujillo
701 Ocean St. Room 410
Santa Cruz, CA 95060
(831) 454-2160

Reporting Biologist Matt Johnson
Senior Environmental Scientist/Project Manager
Denise Duffy & Associates, Inc.
947 Cass Street, Suite 5
Monterey, California 93940
(831) 373–4341 x27

As a County-approved biologist, I hereby certify that this Biological Resources Assessment was prepared according to the Guidelines established by the County of Santa Cruz Planning Department and that the statements furnished in the report and associated maps are true and correct to the best of my knowledge and belief; and I further certify that I was present throughout the site visit(s) associated with this report.



Matt Johnson, Senior Environmental Scientist/Project Manager
DENISE DUFFY & ASSOCIATES, INC.

EXECUTIVE SUMMARY

The Santa Cruz County Sanitation District (SCCSD) is proposing the Rodeo Gulch Sewer Replacement Project (project), located in an unincorporated area of Santa Cruz County (County), California, partially within the Coastal Zone. The project consists of rehabilitation of the existing sewer main via cured-in-place pipe (CIPP) lining or replacement via open trench, and the installation of an auxiliary wet well at an existing pump station. To inform the project's environmental quality analysis, Denise Duffy & Associates, Inc. (DD&A) prepared this report to identify sensitive biological resources which may occur within and adjacent to the project site, analyze what types of impacts to those resources could result from the project, and provide recommended avoidance and minimization measures to reduce impacts to a less than significant level under the California Environmental Quality Act (CEQA).

Summary of Results

Four habitat types, including arroyo willow riparian, coast live oak woodland, non-native grassland, and ruderal, occur within the project site. The following sensitive habitats were identified within or directly adjacent to the project site:

- Arroyo willow riparian,
- Coast live oak woodland,
- Waters of the U.S. and/or state, and
- Critical habitat for tidewater goby (*Eucyclogobius newberryi*).

Based on observations, presence of appropriate habitat, and known occurrences within the vicinity, the following special-status species are known or have the potential to occur within or directly adjacent to the project site:

- Pallid bat (*Antrozous pallidus*) – SSC,[1]
- Townsend's big-eared bat (*Corynorhinus townsendii*) – SSC,
- San Francisco dusky-footed woodrat (*Neotoma macrotis annectens*) – SSC,
- Tidewater goby – FE/SSC,
- Santa Cruz black salamander (*Aneides niger*) – SSC,
- California giant salamander (*Dicamptodon ensatus*) – SSC,
- Western pond turtle (*Emys marmorata*) – SSC, and
- Birds of prey and birds listed by the MBTA.

No special-status plants are known or expected to occur within the project site. However, the project would result in the removal of significant trees, as defined in Santa Cruz County Code Section 16.34.030.

Summary of Potential Impacts and Proposed Recommendations

Construction of the project may result in adverse impacts to sensitive biological resources, including fill or removal of and introduction of hazardous materials into sensitive habitats; mortality of and/or loss of habitat for special-status species; and removal of significant trees. This report identifies the regulatory permit

[1] Status Definitions – FE: Federally Endangered; FT: Federally Threatened; ST: State Threatened; SSC: Species of Special Concern; SR: California Native Plant Protection Act (CNPPA) Rare; CRPR 1B: California Rare Plant Rank (CRPR) 1B species; CRPR 2B: CRPR 2B Species.

approvals which may be required for the project and, where necessary, provides recommendations to avoid or minimize potential impacts to sensitive biological resources. Recommendations include preparation and implementation of an employee education program, implementation of construction best managements practices, pre-construction special-status species surveys, development of a Habitat Restoration Plan, development of a Containment Plan, and construction monitoring.

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Appendices

1. INTRODUCTION

Denise Duffy & Associates, Inc. (DD&A) was contracted by Carollo Engineers, Inc. to prepare this Biological Resources Report for the Rodeo Gulch Sewer Replacement Project (project), located in an unincorporated area of Santa Cruz County (County), California (**Figures 1 and 2**). The project consists of rehabilitation of the existing sewer main via cured-in-place pipe (CIPP) lining or replacement via open trench, and the installation of an auxiliary wet well at an existing pump station. These improvements are necessary to contain the existing sewer flows in wet weather storm events. The project proponent is the Santa Cruz County Sanitation District (SCCSD).

This report identifies sensitive biological resources which may occur within and adjacent to the project site, analyzes what types of impacts to those resources could result from the project, and provides recommended avoidance, and minimization measures to reduce impacts. This report also includes an overview of regulatory permits and authorizations that may be required for the project.

1.1 Project Location

The project site lies in an unincorporated area of the County between the Cities of Santa Cruz and Capitola (**Figures 1 and 2**). The project alignment is approximately 1.5 miles long and includes two segments: Upper Rodeo Gulch Trunkline and Lower Rodeo Gulch Trunkline (**Figure 2**). The project (including access routes) runs through various properties, including County-owned and private properties; SCCSD holds recorded or prescriptive easements through these properties to maintain its pipeline, and is coordinating with property owners for additional temporary construction easements where appropriate.

1.2 Project Description

SCCSD owns and maintains the Rodeo Gulch Sewer Trunkline, which extends from Soquel Drive to just north of Portola Drive and generally runs parallel to Rodeo Gulch. The trunkline collects wastewater in 8 to 18-inch asbestos cement pipe (ACP), vitrified clay pipe (VCP), and polyvinyl chloride (PVC) sanitary sewer pipes and conveys it to the Rodeo Pump Station located on Richmond Drive just north of Portola Drive and adjacent to Rodeo Gulch.

Analysis of the sewer system indicates that the existing wet weather flows exceed the capacity of the system and overload two pipeline reaches of the Rodeo Gulch Sewer Trunkline as well as the Rodeo Pump Station. The two overloaded pipeline reaches of the Rodeo Gulch Sewer Trunkline include the Upper Rodeo Gulch Trunkline, which extends from Soquel Drive to just north of Capitola Road; and the Lower Rodeo Gulch Trunkline, which extends from just south of the railroad tracks to just north of Portola Drive. The analysis is based on a sewer system model calibrated using wet and dry weather flow monitoring. The analysis indicates that these components of the system have an increased potential for sanitary sewer overflows, and that rainfall infiltration and inflow into the sewer system is a significant contributing factor to overloaded conditions. Infiltration and inflow are the processes of storm water entering the sanitary sewer system through structural defects in pipes, joints, manholes and other connections. Excessive infiltration and inflow also increase the costs for pumping and treating wastewater. The structural defects in the pipelines also allow wastewater to seep into the soil.

The overall project is intended to reduce the potential for sewer overflows by minimizing infiltration and inflow into the sewer system and increasing the system capacity to meet the existing wet weather flow demands. The overall project is divided into three separate construction projects (**Figure 2**): The Upper

Rodeo Gulch Trunkline Rehabilitation Project, the Lower Rodeo Gulch Trunkline Replacement Project, and the Rodeo Pump Station Capacity Upgrade Project. These projects will be bid as separate projects and may not be constructed concurrently.

Upper Rodeo Gulch Trunkline Rehabilitation

The Upper Rodeo Gulch Trunkline, extends from Soquel Drive to just north of Capitola Road and runs parallel to the Rodeo Gulch and adjacent to existing developments (**Figures 3a-e**). The land cover along the alignment and its immediate vicinity is described as developed, ruderal, non-native grassland, arroyo willow riparian, and coast live oak woodland. Details of these habitat types are described in subsequent sections of this document. SCCSD routinely inspects and maintains the trunkline through recorded or prescriptive easements on the affected properties.

The trunkline was installed in 1959 and includes approximately 4,600 feet of 8-inch and 10-inch pipes constructed mostly of ACP and VCP materials. The trunkline includes a short segment of pipe supported by a steel bridge spanning approximately 144 feet across an ephemeral tributary to Rodeo Gulch, that conducts stormwater, in the southern portion of the project. The project also includes two branch pipes connecting to the trunkline. The first branch pipe is approximately 290 feet of 6-inch ACP connecting the existing Mattison Lane sewer to the trunkline north of Highway 1. The second branch pipe is approximately 160 feet of 8-inch ACP connecting the Maciel Avenue sewer to the trunkline in the southern portion of the project. Both branch pipes serve existing developed land west of the Upper Rodeo Gulch Trunkline.

Video inspection of the pipe system indicates it has deteriorated structurally and is a significant source of infiltration and inflow into the Rodeo Gulch Sewer System during wet weather flows. The analysis of the system indicates reducing excessive infiltration and inflow into the trunkline will result in the existing pipes of the Upper Rodeo Gulch Trunkline providing sufficient capacity to convey wet weather flow, as well as decreasing flow in the downstream facilities.

The project will rehabilitate the structural integrity of the Upper Rodeo Gulch Trunkline using cured-in-place pipe (CIPP) lining, which is a trenchless method of rehabilitating buried pipelines that minimizes excavation and decreases potential construction impacts to sensitive resources. CIPP lining is accomplished from relatively small work areas around existing manholes and includes bypassing a segment of pipe, pipe cleaning, installing the liner, and reopening lateral connections.

The CIPP lining process involves inserting and pulling a resin-impregnated fabric liner through an existing pipe and inflating it using water, steam, or air; as the resin cures, it forms a tight-fitting, jointless, and corrosion-resistant structural liner within the existing pipe. The liner is prepared inside a small box truck, which will be located at a manhole work area while the lining is performed. Reopening the lateral connections is accomplished by robotic tools within the pipeline, operated from the manhole work area. CIPP construction equipment will likely include bypass pumps, box truck, pick-up trucks and light utility terrain vehicles, backhoe, air compressor, boiler, generator, and a water truck or trailer.

Bypassing consists of placing a temporary pump in an upstream manhole. The pump discharges into a temporary pipe laying on the ground surface near the existing trunkline alignment and conveys sewer flows around the work area to a downstream manhole. The temporary pipe will likely be 6 to 8-inch flexible pipe moved into position by hand or using a light utility terrain vehicle.

Most of the access routes to the manhole work areas occur from developed land or, ruderal and non-native grassland habitat. The CIPP lining equipment and crews will access manhole work areas ED58, ED59, ED20, EH11, EH13, EH17, and EH27 by traversing the trunkline alignment through coast live oak woodland and/or arroyo willow riparian habitats. The access is consistent with how maintenance crews are currently accessing the trunkline. The manhole work areas vary in size, but typically include a 40-foot diameter circle around the manhole (approximately 1,260 square feet) (**Figure 3a-e**). Work areas associated with manholes ED58, ED59, ED11, ED20, ED22, ED33, ED40, EH5, EH7, EH181, EH11, EH18, EH17, EH27, EH40, EH48, and EH39 are in or near riparian and coast live woodland areas. Maintenance crews routinely trim back excess vegetation encroaching on the manholes, as well as perform video inspection of the system from these manholes. The primary construction staging area where equipment and material will be stored is located at the north end of the project in ruderal habitat, adjacent to Soquel Drive (**Figure 3a**). Short term staging will also occur at other locations in areas consisting of ruderal and non-native grassland habitat (**Figures 3a-e**). Construction heavy equipment will return to a staging area at the end of each workday.

Two sections of the Upper Rodeo Gulch Trunkline, approximately 290 linear feet of 6-inch branch pipe located at Mattison Lane (manhole work areas ED32 to ED33, **Figure 3b**) and approximately 160 linear feet of 8-inch branch pipe located at Maciel Avenue (manhole work areas EH39 to EH48, **Figure 3e**), will be replaced utilizing an open cut trench construction methodology. The 6-inch branch pipe connecting the Mattison Lane sewer to the trunkline north of Highway 1 will be replaced with an 8-inch pipe using conventional open trenching methods. Most of this pipe reach is in ruderal habitat with a limited portion of the reach adjacent to or just within arroyo willow riparian. Construction of this branch pipe will require removal of a 11-inch diameter at breast height (dbh) blue gum eucalyptus (*Eucalyptus globulus*) tree. Video inspection of the existing pipe indicates significant deterioration. SCCSD requires all new sewer pipes have a minimum 8-inch diameter for ease of maintenance and video inspection. The 8-inch branch pipe connecting the Maciel Avenue sewer to the trunkline in the southern portion of the project will be replaced with a 10-inch pipe using conventional open trenching methods. Most of this pipe reach is in ruderal habitat on the edge of arroyo willow riparian. Video inspection of the existing pipe indicates a sag, which precludes the use of trenchless pipe rehabilitation methods. The existing pipe will be replaced with a 10-inch pipe to provide sufficient capacity to meet wet weather flow demands.

Conventional open trenching construction includes a trench approximately 3 to 5 feet wide, with construction activities expected to occur within an approximate 15 to 20 feet wide construction corridor. Excavation material will be stockpiled directly adjacent to the trench, avoiding riparian habitat, whenever feasible. Once the pipe is installed, the trench will be backfilled, and areas that were vegetated prior to replacement will be revegetated. Conventional open trenching construction equipment will include pickup trucks, an excavator, dump trucks, backhoes, or loaders and a bypass pump system. Equipment and material will be staged on developed land or ruderal habitat at several locations along the project, heavy machinery will return to the staging area at the end of the workday.

The Upper Rodeo Gulch Trunkline Rehabilitation project also includes repair of an existing steel trestle bridge supporting a short segment of pipe over an ephemeral tributary to Rodeo Gulch Creek. The bridge is approximately 18 feet above ground at its highest point and includes a single midspan pier. The bridge is located within arroyo willow riparian habitat and crosses an ephemeral tributary to Rodeo Gulch Creek that conveys urban runoff during storm events from existing developments located west of Rodeo Gulch.

Anticipated bridge rehabilitation work includes removing the existing paint by sandblasting, repainting, and repairing or replacing damaged steel frame members. Bridge work will be performed during dry periods when stormwater in the drainage is not likely. Access to the bridge and staging for the bridge work will be from ruderal habitat on the south side of the bridge. Bridge rehabilitation will require removing one multi-stemmed coast live oak (*Quercus agrifolia*) tree with a dbh of 45 inches, growing adjacent to the bridge on the north bank, as well as clearing and grubbing approximately 10-15 feet of brush on each side of the bridge. Inspection and repair work will be performed from conventional scaffolding with the metal pads placed on the ground or on wood blocking adjacent to the structure. Sandblasting tarps, or other containment screens, will be placed on the scaffolding, bridge, and ground to contain debris related to the bridge rehabilitation. Scaffolding footings will avoid the lowest elevations of the tributary. The SCCSD will prepare a Containment Plan such that no hazardous materials enter the ephemeral tributary, or the surrounding arroyo willow riparian habitat. Details of the Containment Plan are detailed below in Section 4. It is anticipated that scaffolding will be erected by hand and no heavy equipment will enter the drainage channel.

Lower Rodeo Gulch Trunkline Replacement

The Lower Rodeo Gulch Trunkline extends from just south of the railroad tracks following Soquel Drive, past intersections with Monterey Drive, Delmar Dive, Aptos Drive, and Felt Street, before entering an apartment complex and eventually connecting to the Rodeo Pump Station, just north of Portola Drive (**Figures 3f-g**). The Lower Rodeo Gulch Trunkline is located within the paved roadways for the majority of the alignment, although there are a few small sections that intersect ruderal habitat.

The trunkline includes approximately 1,800 feet of 16-inch and 18-inch sewer pipe constructed mostly of ACP material. Analysis of this system indicates the existing wet weather flows exceed the capacity of the trunkline. For this reach, minimizing infiltration and inflow is not sufficient to obtain the capacity required. The project will replace the existing pipes with a 21-inch pipe to accommodate the existing wet weather flow demands using conventional open trenching construction.

Conventional open trenching will use a pipeline construction trench approximately 3 to 5 feet wide, with construction activities expected to occur within a 10 to 15-feet wide construction corridor. Construction of this trunkline will require the removal of six trees. Construction of this trunkline will also require a temporary bypass system like that used in the Upper Rodeo Gulch Trunkline Rehabilitation Project. Excavation material will be stockpiled on developed areas or ruderal habitat. Once the pipe is installed, the trench will be backfilled, disturbed areas that were previously vegetated will be revegetated, and disturbed areas that were previously paved will be resurfaced. Construction equipment and material is similar to that of the Upper Rodeo Gulch Trunkline Rehabilitation Project and will be staged on developed land or ruderal habitat at several locations along the trunkline alignment.

Rodeo Pump Station Capacity Upgrade

The Rodeo Pump Station is located on Richmond Drive at the bottom of the Lower Rodeo Gulch Trunkline Replacement Project alignment near Portola Drive, adjacent to Rodeo Gulch, within the Coastal Zone (**Figure 3h**). The project site includes developed land and ruderal habitat.

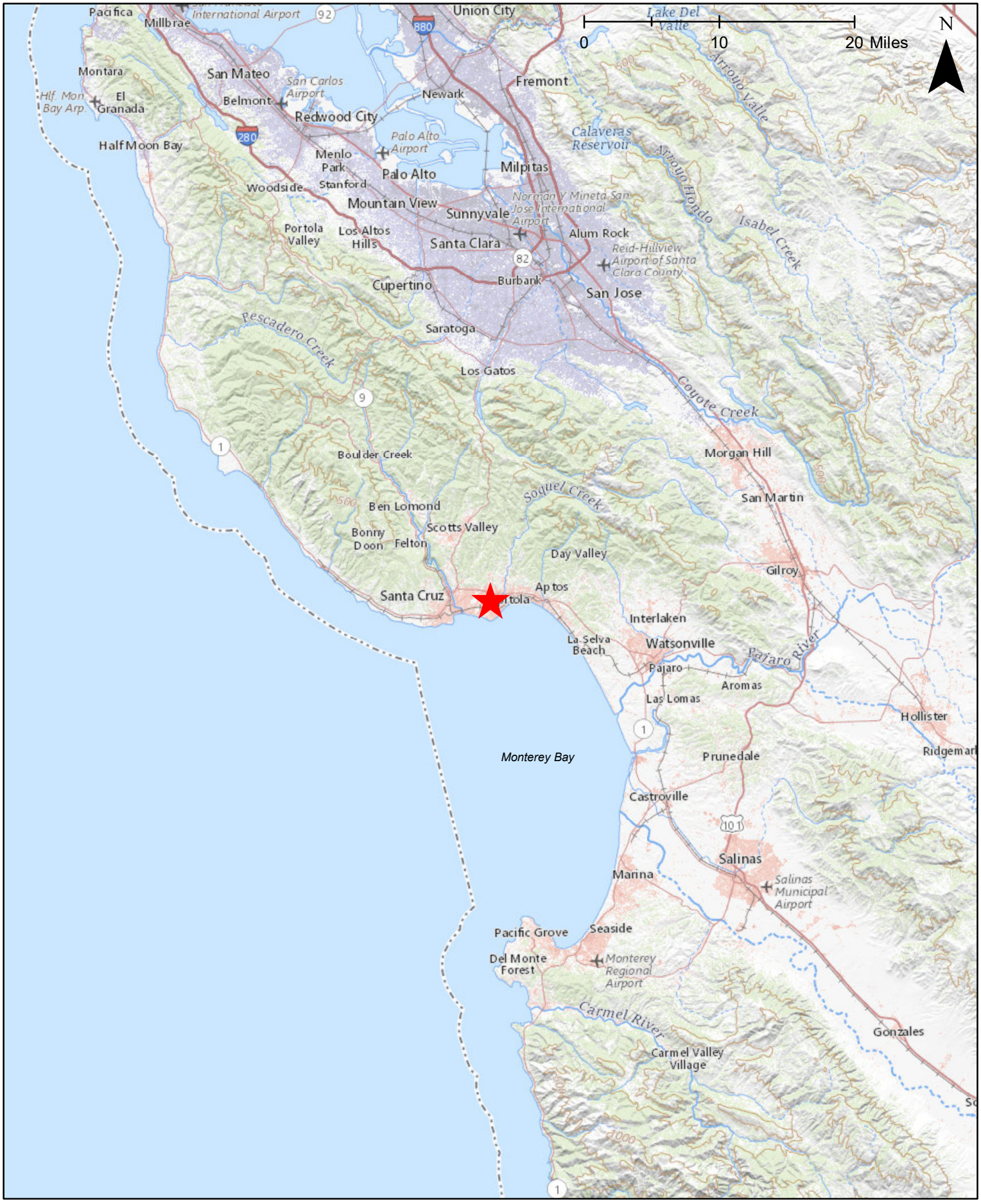
Analysis of the upstream sewer system indicates the existing wet weather flows exceed the pump station capacity. SCCDS is proposing to increase the existing pump station capacity to meet the wet weather flow

demand by constructing a new auxiliary wet well system. In this system, when the wastewater flows into the pump station exceeds the pump station operational capacity, they will be diverted into the auxiliary wet well for storage. Once capacity is available, wastewater stored in the auxiliary wet well will be returned to the pump station and discharged to the downstream sewer system. With the auxiliary wet well system, the pump station will provide the required capacity to meet the wet weather flow demand, as well as a reasonable factor of safety in the event of power or equipment failures; this will reduce the potential for sewer overflows.

The new auxiliary wet well will be constructed within an existing paved/gravel lot adjacent to the existing wet well and includes a large underground concrete structure along with the necessary pipes and equipment required to divert and return flows to the pump station. Construction activities will include dewatering, excavation and backfilling, shoring, installing concrete formwork and reinforcing, pouring concrete, and installing miscellaneous hardware. Construction may also include the temporary relocation or permanent re-routing of utilities to accommodate the new structures and piping. Construction equipment will likely include pickup trucks, a boom truck, an excavator, dump trucks, concrete trucks, backhoes, a crane, and loaders.

The equipment and materials will be staged at the project site on developed land or ruderal habitat. Some of the excavation material acceptable to be used as backfill may also be stockpiled on ruderal habitat within the project site, with the remaining material loaded onto trucks and disposed of offsite. All construction activities, staging, stockpiling, and access corridors will be located outside of Rodeo Gulch and the associated arroyo willow riparian habitat. Once the underground structure and piping has been installed, the area will be backfilled and resurfaced with gravel, concrete, or pavement.

Construction for all three projects is estimated to take a total of 18 months, pipeline bridge repair work will be scheduled outside of the rainy season from October 15 through May 15 to avoid any potential for surface water within the Rodeo Gulch Creek tributary.



Project Vicinity

Date	Figure
5/26/2022	1
Scale: 1 in = 50,000 ft	

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

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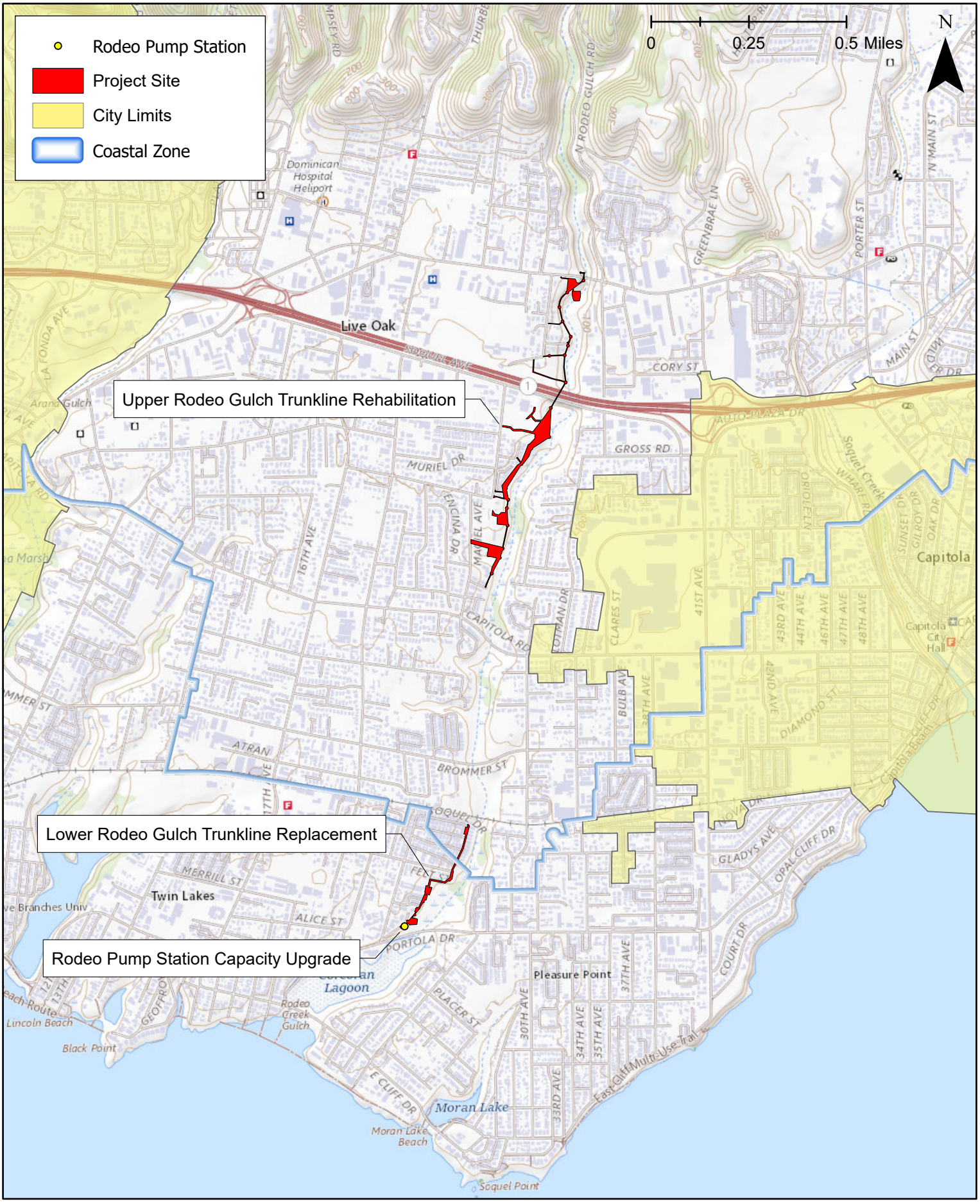

Project Location

Date	Figure
11/2/2022	2
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Planning and Environmental Consulting

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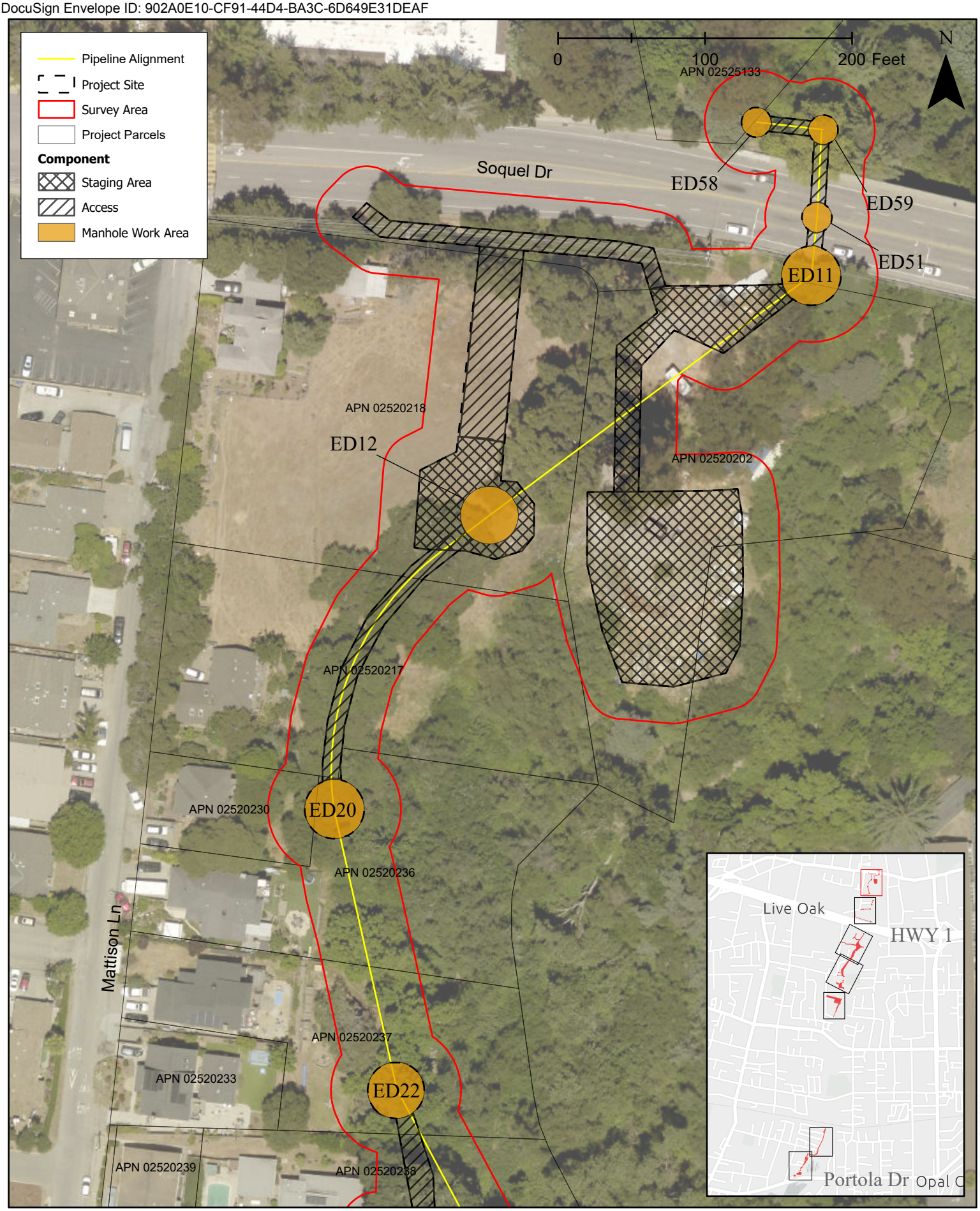

Upper Rodeo Gulch Site Plan

Date	Figure
11/30/2022	3a
Scale: 1 inch = 80 feet	

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

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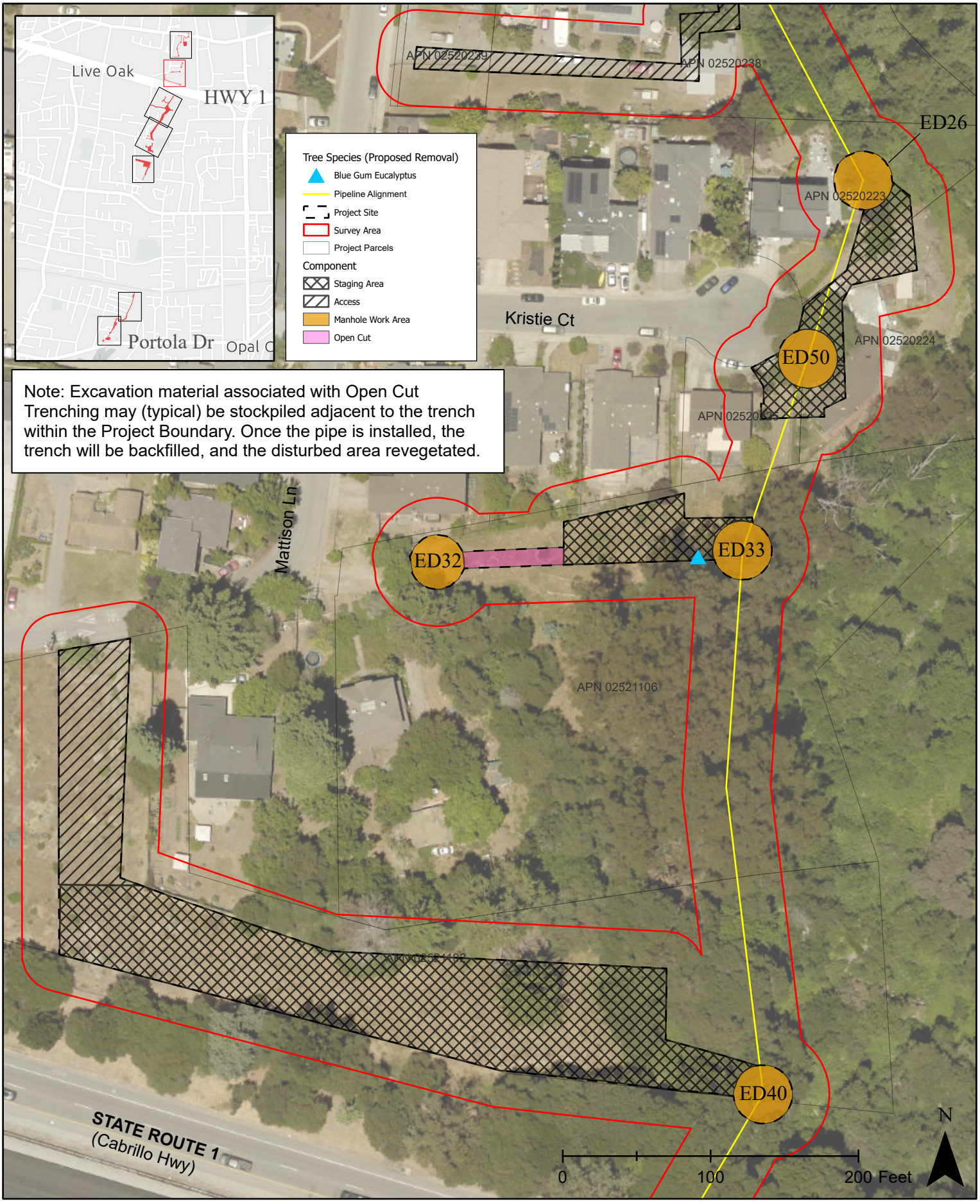

Upper Rodeo Gulch Site Plan

Date	Figure
11/30/2022	3b
Scale: 1 inch = 80 feet	

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

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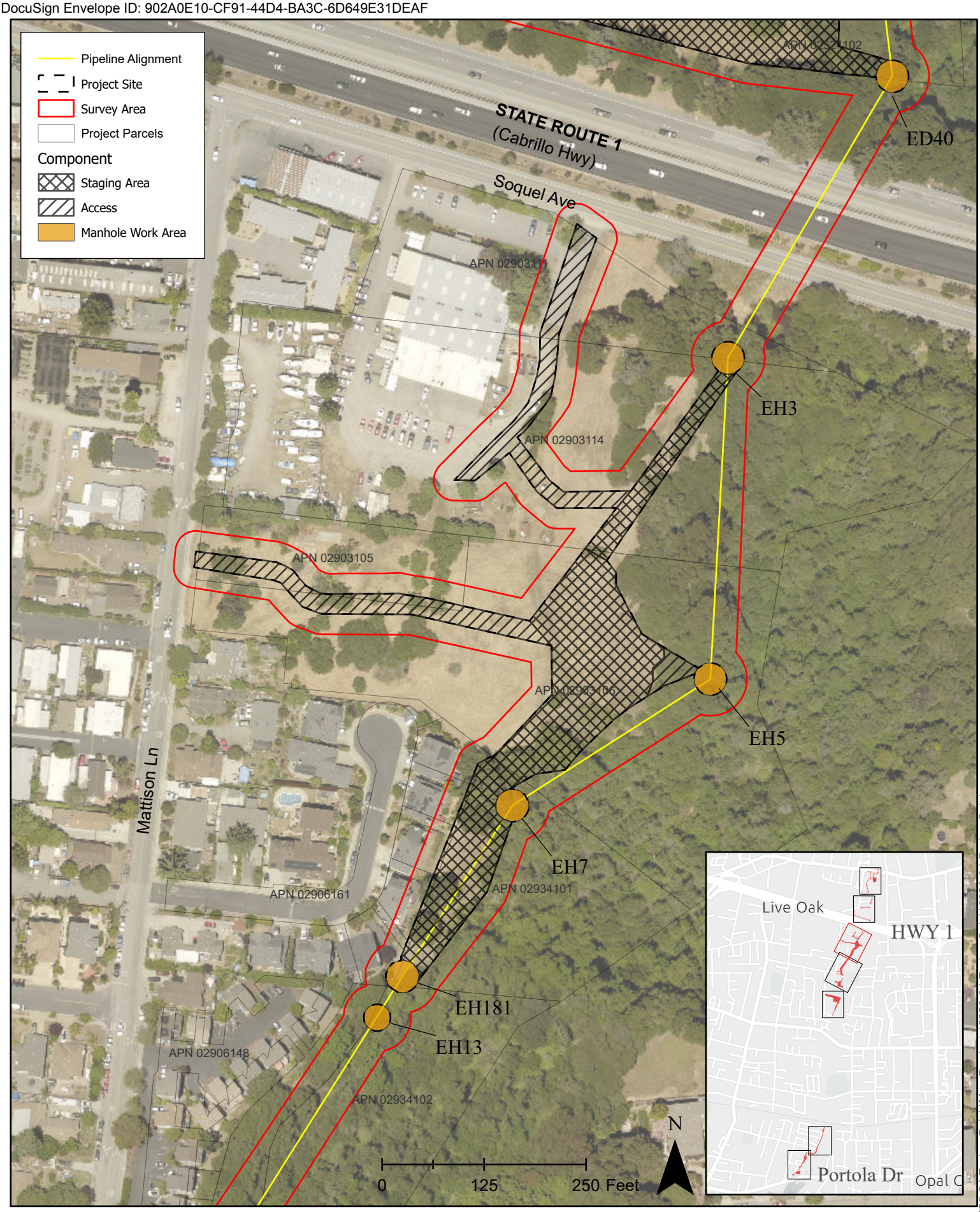

Upper Rodeo Gulch Site Plan

Date	Scale	Figure
11/30/2022	1 inch = 150 feet	3c

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Planning and Environmental Consulting

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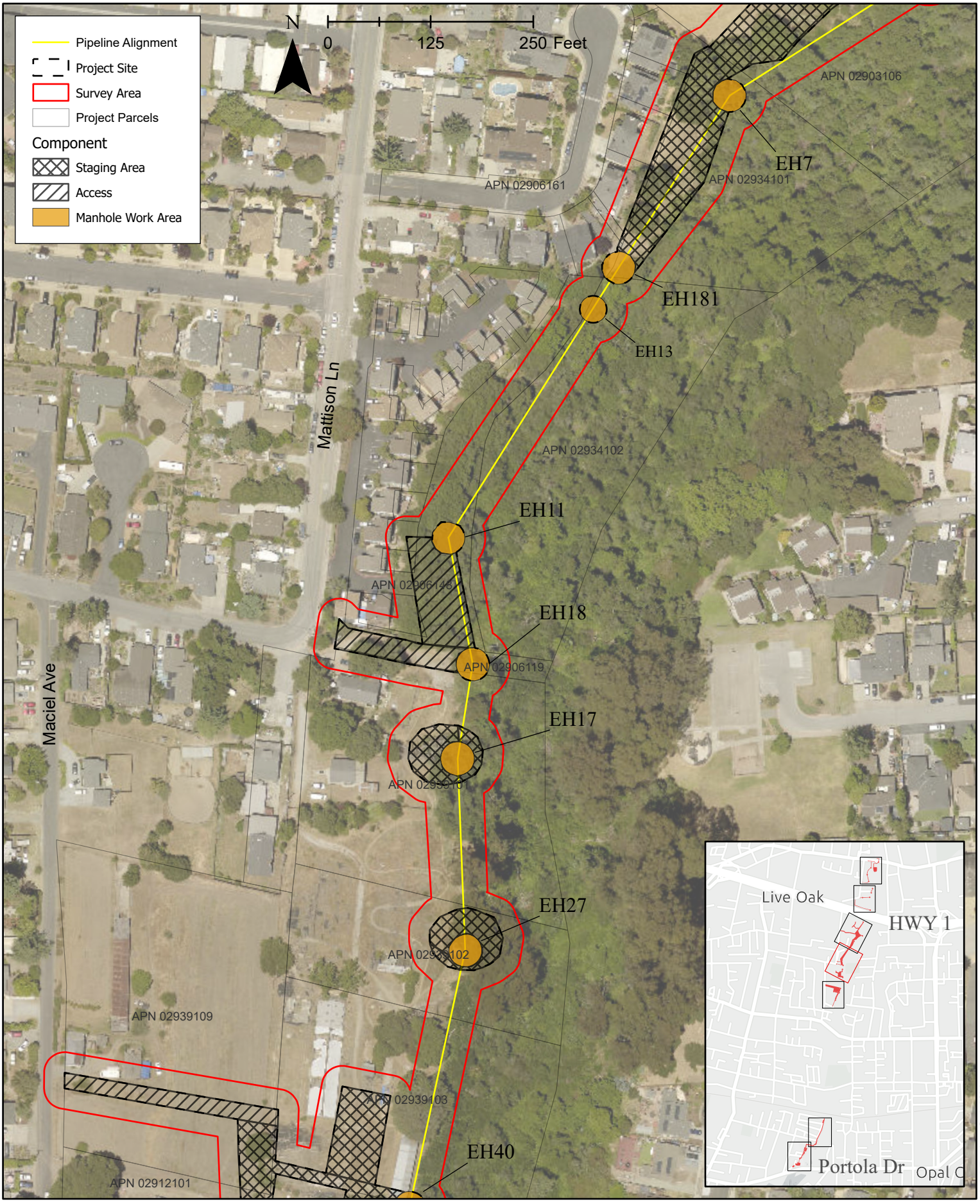

Upper Rodeo Gulch Site Plan

Date
11/30/2022

Scale
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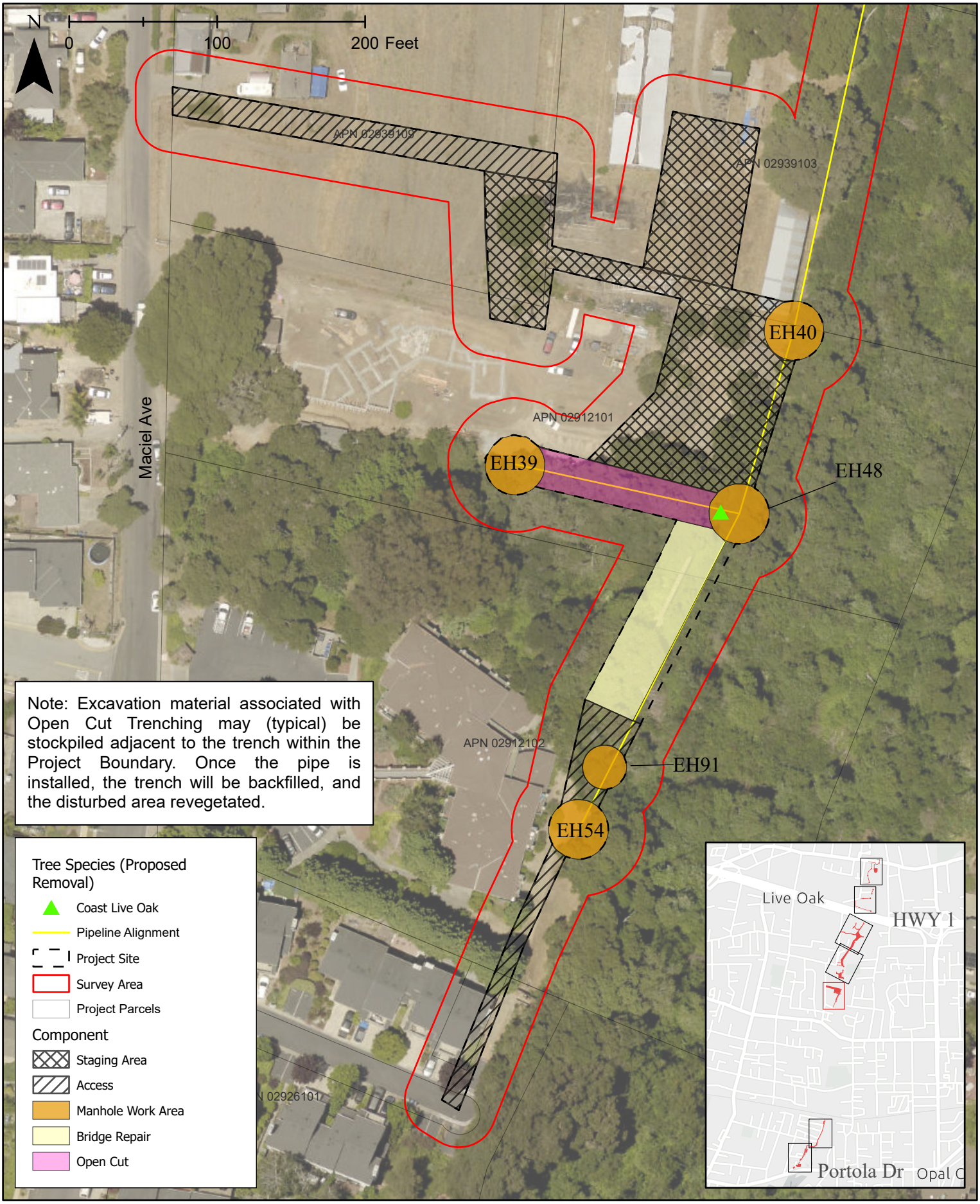

Upper Rodeo Gulch Site Plan

Date	Scale	Figure
11/30/2022	1 inch = 80 feet	3e

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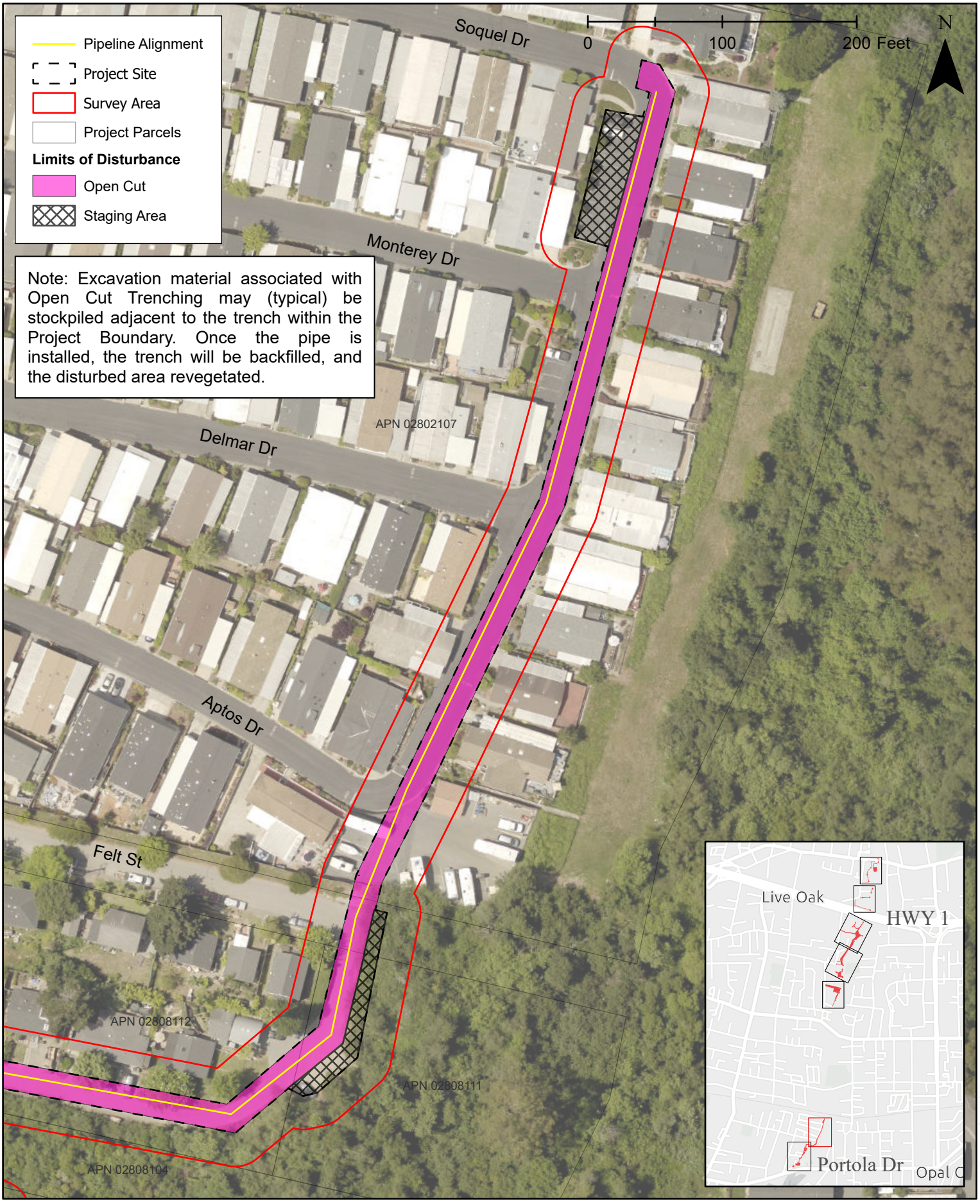

Lower Rodeo Gulch Site Plan

Date	Scale	Figure
11/30/2022	1 inch = 90 feet	3f

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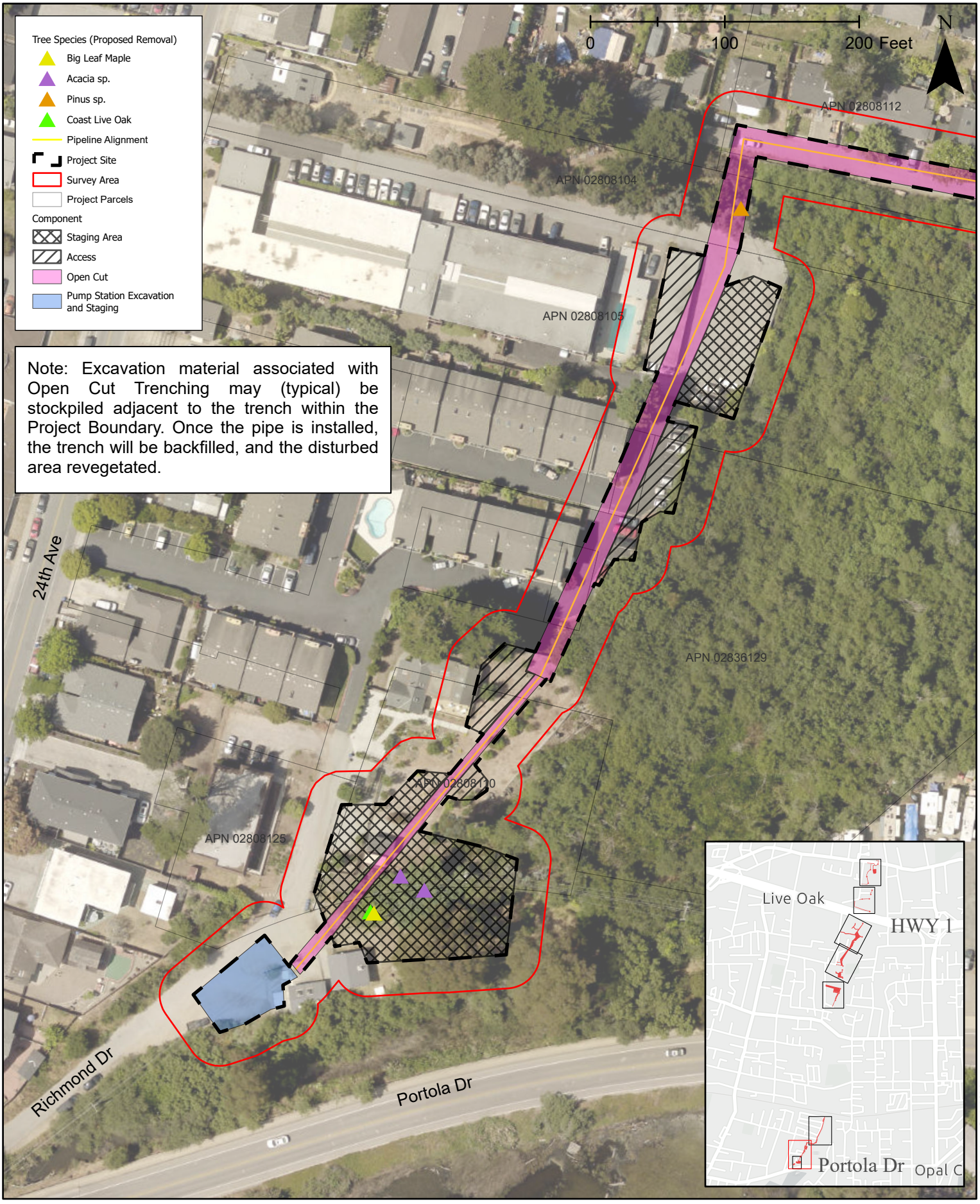

Note: Excavation material associated with Open Cut Trenching may (typical) be stockpiled adjacent to the trench within the Project Boundary. Once the pipe is installed, the trench will be backfilled, and the disturbed area revegetated.

Lower Rodeo Gulch Site Plan

Date
11/30/2022

Scale
1 inch = 90 feet

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Planning and Environmental Consulting

Figure
3g

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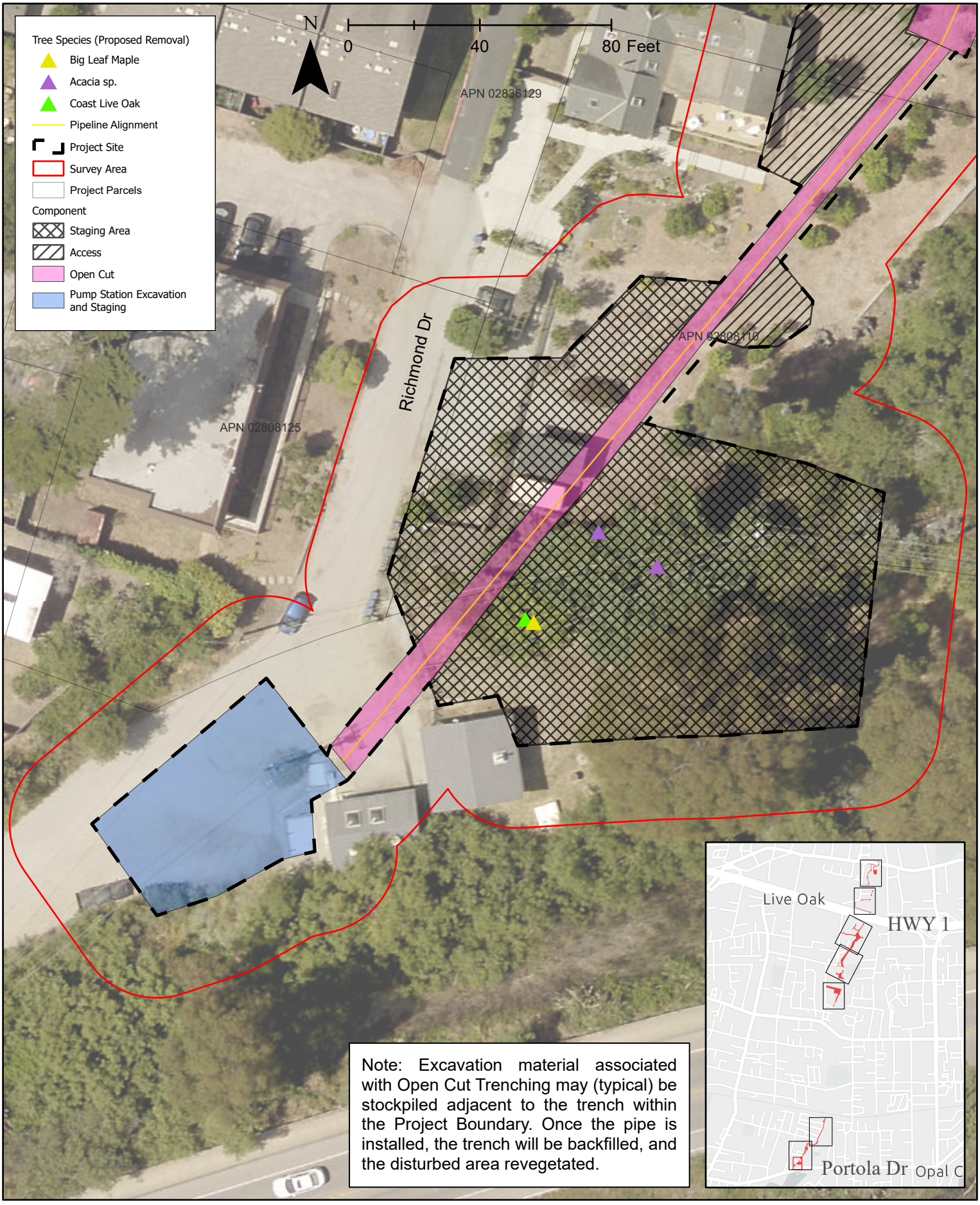

Note: Excavation material associated with Open Cut Trenching may (typical) be stockpiled adjacent to the trench within the Project Boundary. Once the pipe is installed, the trench will be backfilled, and the disturbed area revegetated.

Lower Rodeo Gulch & Pump Station Site Plan

Date
11/30/2022

Scale
1 inch = 40 feet

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
3h

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2. METHODS

2.1 Personnel and Survey Methods

DD&A Senior Environmental Scientist Matt Johnson and Associate Environmental Scientist/Arborist Patric Krabacher conducted surveys of the survey area on June 2, 2020, July 7, 2021, and February 18, 2022, to characterize habitats present within the project site and to identify any special-status plant or wildlife species or suitable habitat for those species within the site. The survey area consisted of all areas of disturbance described in the project description, including areas of staging, stockpiling, and access, plus a buffer of approximately 25 feet to assess potential impacts to surrounding habitat. The survey area also included sections of pipeline between entry and exit pits where CIPP lining will be performed, although no construction impacts are expected on these sections. Survey methods included walking the survey area and using aerial maps and GPS to identify general habitat types and potential sensitive habitat types, conducting a focused survey for perennial, late spring-blooming, and early summer-blooming special-status plant species, and conducting a reconnaissance-level wildlife habitat survey to identify any special-status wildlife species or suitable habitat for those species occurring within the site.

The survey area was surveyed for botanical resources following the applicable guidelines outlined in the U.S. Fish and Wildlife Service (Service) *Guidelines for Conducting and Reporting Botanical Inventories for Federally listed, Proposed and Candidate Plants* (Service, 2000), the California Department of Fish and Wildlife (CDFW) *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (CDFW, 2018), and the California Native Plant Society (CNPS) *Botanical Survey Guidelines* (CNPS, 2001). General and sensitive habitat types were mapped during the survey effort using a combination of GPS and hand drawing on aerial maps, which were later digitized using ArcGIS software.

Surveys also included an assessment of potentially jurisdictional wetlands and waters within the survey area in accordance with the requirements set forth in *The Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual* (Wetland Training Institute, 1995) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (U.S. Army Corps of Engineers [ACOE], 2008).

Data collected during the surveys were used to assess the environmental conditions of the project site and its surroundings, evaluate environmental constraints at the site and within the local vicinity, and provide a basis for recommendations to minimize and avoid impacts to biological resources.

2.2 Data Sources

The primary literature and data sources reviewed to determine the presence or potential presence of special-status species and biological resources at the survey area include:

- Current agency status information from the Service and CDFW for species listed, proposed for listing, or candidates for listing as threatened or endangered under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA), and those considered CDFW "species of special concern", including:
    - California Natural Diversity Database (CNDDB) occurrence reports from the Felton, Laurel, Loma Prieta, Moss Landing, Santa Cruz, Soquel, and Watsonville West quadrangles (**Appendix A**; CDFW, 2022b); and

  - The Service's Information for Planning and Consultation (IPaC) Resource List for the survey area (**Appendix B**; Service, 2022).
- The CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2020).

From these resources, a list of special-status plant and wildlife species known or with the potential to occur in the vicinity of the survey area was created (**Appendix C**). This list presents these species along with their legal status, habitat requirements, and a brief statement of the likelihood to occur within the site.

2.2.1 Botany

Vegetation alliances identified in *A Manual of California Vegetation* (Sawyer et.al., 2009) were utilized to determine if habitat types identified as sensitive on CDFW's *California Natural Communities List* (CDFW, 2022a) are present within the survey area. Information regarding the distribution and habitats of local and state vascular plants was also reviewed (Beidleman and Kozloff, 2014; Jepson Flora Project, 2020). All plants observed within the survey area during the surveys were identified to species or intraspecific taxon necessary to eliminate them as being special-status species using keys and descriptions in *The Jepson Manual: Vascular Plants of California, Edition 2* (Baldwin et al., 2012) and *The Plants of the San Francisco Bay Region: Mendocino to Monterey* (Beidleman and Kozloff, 2014). Scientific nomenclature for plant species identified within this document follows Baldwin, et. al, (2012); common names follow Beidleman and Kozloff (2014). A full botanical inventory was not recorded for the survey area, but the dominant species within each habitat type were noted. Dominant plant species are those which are more numerous than their competitors in an ecological community or make up more of the biomass; generally, the species that are most abundant. Most ecological communities are defined by their dominant species.

The California Invasive Plant Council (Cal-IPC) Inventory (Cal-IPC, 2020) was reviewed to determine if any invasive plant species are present within the survey area.

2.2.2 Wildlife

The following literature and data sources were reviewed: CDFW reports on special-status wildlife (Remsen, 1978; Williams, 1986; Jennings and Hayes, 1994; Thelander, 1994; Thomson et. al, 2016); California Wildlife Habitat Relationships Program species-habitat models (Zeiner et al., 1988 and 1990); and general wildlife references (Stebbins, 1972, 1985, and 2003).

2.3 Definitions

2.3.1 Sensitive Habitats

Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species, areas of high biological diversity, areas supporting rare or special-status wildlife habitat, and unusual or regionally restricted habitat types. Vegetation communities considered sensitive include those listed on CDFW's *California Natural Communities List* (i.e., those habitats that are rare or endangered within the borders of California) (CDFW, 2022a), those that are occupied by species listed under the ESA or are critical habitat in accordance with ESA, and those that are defined as Environmentally Sensitive Habitat Areas (ESHA) under the California Coastal Act (CCA). Specific habitats may also be identified as sensitive in city or county general plans or ordinances. Sensitive habitats are regulated under federal regulations (such as the Clean Water Act [CWA] and Executive Order [EO] 11990 – Protection of Wetlands), state regulations (such as CEQA and the CDFW Streambed Alteration Program), or local ordinances or policies (such as city or county tree ordinances and general plan policies).

2.3.2 Special-Status Species

Special-status species are those plants and animals that have been formally listed or proposed for listing as endangered or threatened or are candidates for such listing under ESA or CESA. Listed species are afforded legal protection under the ESA and CESA. Species that meet the definition of rare or endangered under the CEQA Guidelines Section 15380 are also considered special-status species. Animals on the CDFW's list of "species of special concern" (most of which are species whose breeding populations in California may face extirpation if current population trends continue) meet this definition and are typically provided management consideration through the CEQA process, although they are not legally protected under the ESA or CESA. CDFW also includes some animal species that are not assigned any of the other status designations in the CNDDB "Special Animals" list; however, these species have no legal or protection status and are not analyzed in this document.

Plants listed as rare under the California Native Plant Protection Act (CNPPA) or included in CNPS California Rare Plant Ranks (CRPR; formerly known as CNPS Lists) 1A, 1B, 2A, and 2B are also treated as special-status species as they meet the definitions of Sections 2062 and 2067 of the CESA and in accordance with CEQA Guidelines Section 15380.[2] In general, the CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere); and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (CNPS, 2020) be fully considered during the preparation of environmental documents relating to CEQA. CNPS CRPR 4 species (plants of limited distribution) may, but generally do not, meet the definitions of Sections 2062 and 2067 of CESA, and are not typically considered in environmental documents relating to CEQA. While other species (i.e., CRPR 3 or 4 species) are sometimes found in database searches or within the literature, these do not meet the definitions of Section 2062 and 2067 of CESA and are not analyzed in this document.

Raptors (e.g., eagles, hawks, and owls) and their nests are protected under the federal Migratory Bird Treaty Act (MBTA) and under California Fish and Game Code Section 3503.5. Section 3503.5 states that it is "unlawful to take, possess, or destroy the nest or eggs of any such bird except otherwise provided by this code or any regulation adopted pursuant thereto." In addition, protected species under Fish and Game Code Section 3511 (birds), Section 4700 (mammals), Section 5515 (fish), and Section 5050 (reptiles and amphibians) are also considered special-status animal species. Species with no formal special-status designation but thought by experts to be rare or in serious decline may also be considered special-status animal species in some cases, depending on project-specific analysis and relevant, localized conservation needs or precedence.

2.4 Regulatory Setting

The following regulatory discussion describes the major federal, state, and local laws that may be applicable to the project.

[2] CNPS initially created five CRPR to categorize degrees of concern; however, to better define and categorize rarity in California's flora, the CNPS Rare Plant Program and Rare Plant Program Committee have developed the new CRPR 2A and CRPR 2B.

2.4.1 Federal Regulations

Federal Endangered Species Act

Provisions of the ESA of 1973 (16 USC 1532 et seq., as amended) protect federally listed threatened or endangered species and their habitats from unlawful take. Listed species include those for which proposed and final rules have been published in the Federal Register. The ESA is administered by the Service or National Oceanic and Atmospheric Administration Marine Fisheries Service (NMFS). In general, the NMFS is responsible for the protection of ESA-listed marine species and anadromous fish, whereas other listed species are under Service jurisdiction.

Section 9 of ESA prohibits the take of any fish or wildlife species listed under ESA as endangered or threatened. Take, as defined by ESA, is "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." Harm is defined as "any act that kills or injures the fish or wildlife…including significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife." In addition, Section 9 prohibits removing, digging up, and maliciously damaging or destroying federally listed plants on sites under federal jurisdiction. Section 9 does not prohibit take of federally listed plants on sites not under federal jurisdiction. If there is the potential for incidental take of a federally listed fish or wildlife species, take of listed species can be authorized through either the Section 7 consultation process for federal actions or a Section 10 incidental take permit process for non-federal actions. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits).

Clean Water Act

The U.S. Army Corps of Engineers (ACOE) and U.S. Environmental Protection Agency (EPA) regulate discharge of dredged and fill material into "Waters of the United States" (waters of the U.S.) under Section 404 of the Clean Water Act (CWA). In 2020, the ACOE and EPA published the Navigable Waters Protection Rule, which became effective on June 22, 2020 and revised the definition of Waters of the U.S. to include four categories of waters: territorial seas and navigable waters; perennial and intermittent tributaries to those waters; certain lakes, ponds, and impoundments; and wetlands adjacent to jurisdictional waters. The rule also details 12 categories of exclusions (i.e., features that are not waters of the U.S.), such as features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems. Discharge into waters of the U.S. requires a Section 404 permit from the ACOE.

Under Section 401 of the CWA, any applicant receiving a Section 404 permit from the ACOE must also obtain a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB). A Section 401 Water Quality Certification is issued when a project is demonstrated to comply with state water quality standards and other aquatic resource protection requirements.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 prohibits killing, possessing, or trading migratory birds except in accordance with regulation prescribed by the Secretary of the Interior. Most actions that result in taking or in permanent or temporary possession of a protected species constitute violations of the MBTA. The USFWS is responsible for overseeing compliance with the MBTA.

2.4.2 State Regulations

California Endangered Species Act

The CESA was enacted in 1984. The California Code of Regulations (Title 14, §670.5) lists animal species considered endangered or threatened by the state. Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. Section 2080 of the Fish and Game Code prohibits "take" of any species that the commission determines to be an endangered species or a threatened species. “Take” is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." A Section 2081 Incidental Take Permit from the CDFW may be obtained to authorize “take” of any state listed species.

California Native Plant Protection Act

The CNPPA of 1977 directed CDFW to carry out the legislature’s intent to “preserve, protect and enhance rare and Endangered plants in the State.” The CNPPA prohibits importing rare and Endangered plants into California, taking rare and Endangered plants, and selling rare and Endangered plants. The CESA and CNPPA authorized the Fish and Game Commission to designate endangered, threatened, and rare species and to regulate the taking of these species (§2050-2098, Fish and Game Code). Plants listed as rare under the CNPPA are not protected under CESA; however, these plants may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research.

California Fish and Game Code

Birds. Section 3503 of the Fish and Game Code states that it is “unlawful to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Section 3503.5 prohibits the killing, possession, or destruction of any birds in the orders Falconiformes or Strigiformes (birds-of-prey). Section 3511 prohibits take or possession of fully protected birds. Section 3513 prohibits the take or possession of any migratory nongame birds designated under the federal Migratory Bird Treaty Act. Section 3800 prohibits take of nongame birds.

Species of Special Concern. As noted above, the CDFW also maintains a list of wildlife “species of special concern.” Although these species have no legal status, the CDFW recommends considering these species during analysis of project impacts to protect declining populations and avoid the need to list them as endangered in the future.

Lake or Streambed Alteration. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW’s jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne) is California's statutory authority for the protection of water quality and applies to surface waters, wetlands, and groundwater, and to both point and nonpoint sources. Under the Porter-Cologne, the State Water Resources Control Board (State Board) has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne also establishes nine RWQCBs to oversee water quality on a day-to-day basis at the local/regional level. The project site is located within Region 3 – Central Coast RWQCB. Porter-Cologne incorporates many provisions of the federal CWA, such as delegation to the State Board and RWQCBs of the National Pollutant Discharge Elimination System (NPDES) permitting program.

Under Porter-Cologne, the state must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. Regional authority for planning, permitting, and enforcement is delegate to the nine RWQCBs. The regional boards are required to formulate and adopt water quality control plans for all areas in the region and establish water quality objectives in the plans. The Porter-Cologne sets forth the obligations of the State Board and RWQCBs to adopt and periodically update water quality control plans (basin plans). The act also requires waste dischargers to notify the RWQCBs of such activities through filing of Reports of Waste Discharge (RWD) and authorizes the State Board and RWQCBs to issue and enforce waste discharge requirements (WDRs), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to RWD requirements and WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects, when implemented according to prescribed terms and conditions.

The term "Waters of the State" is defined by Porter-Cologne as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope but has special responsibility for wetlands, riparian areas, and headwaters, including isolated wetlands, and waters that may not be regulated by the ACOE under Section 404 of the CWA. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program, which regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne.

California Coastal Act

The California Coastal Commission (CCC) was established by voter initiative in 1972 (Proposition 20) and later made permanent by the California State Legislature through adoption of the CCA of 1976. The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. California's coastal zone generally extends 1,000 yards inland from the mean high tide line. In significant coastal estuarine habitat and recreational areas, it extends inland to the first major ridgeline or five miles from the mean high tide line, whichever is less. In developed urban areas, the boundary is generally less than 1,000 yards. Development activities, which are broadly defined by the CCA to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a Coastal Development Permit (CDP) from either the CCC or the local government if a Local Coastal Program (LCP) has been certified. After certification of a LCP, coastal development permit authority is delegated to the appropriate local government, but the CCC retains original permit jurisdiction over certain specified lands (such as tidelands and public trust lands). The Commission also has appellate authority over development approved by local governments in specified geographic areas as well as certain other developments. A CDP is required in addition to any other permit required from resource agencies.

The CCC or the local government may designate areas of rare or unique biological value, such as wetland and riparian habitat and habitats for special-status species, as ESHA. Section 30107.5 of the CCA defines an "environmentally sensitive area" as any area in which plant or animal life or their habitat are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Development is restricted within the coastal zone and prohibited within designated ESHA, unless the development is coastal dependent and does not have a significant effect on the resources. Section 30240 of the CCA states that "environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." This section also states that "development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas and shall be compatible with the continuance of those habitat and recreation areas."

In Santa Cruz County, the Coastal Zone extends approximately five miles inland from the North Coast and is regulated under the County's Local Coastal Program. The Lower Rodeo Gulch portion of the project site lies within the Coastal Zone (**Figure 2**). In accordance with Santa Cruz County Code (SCCC) Section 13.20, any person who wishes to do any sort of land development must obtain a Level 5 development permit from the County. "Development" includes:

- Construction, reconstruction, size alteration, or demolition of a structure,
- Grading, removing, placement, and extraction of any earth material,
- Subdivision and minor land division,
- Change in the density or intensity of land use, and
- Harvesting of major vegetation, except for agriculture and timber harvesting.

California Essential Habitat Connectivity Project

In 2010, CDFW and the California Department of Transportation (Caltrans) commissioned a team of consultants to produce a statewide assessment of essential habitat connectivity using the best available science, data sets, spatial analyses and modeling techniques. The goal was to identify Essential Habitat Connectivity Area (EHCA), which are large remaining blocks of intact habitat or natural landscape and model linkages between them that need to be maintained, particularly as corridors for wildlife. Over sixty federal, state, local, tribal and non-governmental organizations collaborated in the creation of a statewide wildlife habitat connectivity map using a GIS-based modeling approach, an assessment of the biological value of identified connectivity areas, and a strategic plan that helps varied end users interpret and use the statewide map and outlines a methodology necessary for completing connectivity analyses at finer spatial scales. The project site is not located within an EHCA.

2.4.3 Local Regulations

Water Quality Control

Per SCCC Section 16.24, it is unlawful for any person to increase the turbidity or settleable solids in any portion of any body of water in the County beyond the amounts specified in SCCC Sections 16.24.030 and 16.24.040, unless exempted by SCCC Section 16.24.050. Exemptions include, but are not limited to, actions which do not require a permit from any federal, state, or local agency, and actions for which either a negative impact statement or an environmental impact report has been prepared which adequately enumerates the

adverse impact or impacts which the activity may have upon any body of water and for which authorization from the County's Planning Department or the Planning Commission has been obtained.

Riparian Corridor and Wetlands Protection

SCCC Section 16.30 regulates development within or adjacent to riparian corridors, unless exempted by Section 16.30.050 of the Code. Per SCCC Section 16.30.060, development within these areas may be permitted after acquiring an authorization of a Riparian Exception from the County Planning Director.

Sensitive Habitat Protection

SCCC Section 16.32 regulates the disturbance of biological communities which are rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activity. Per SCCC Section 16.32.060, no person shall commence any development activity within an area of biological concern until a biotic approval has been issued or unless such activity has been reviewed for biological concerns concurrently with the review of a development or land-division application.

Tree Protection

Per SCCC Section 16.34, a tree removal permit from the County Planning Director is required to remove or damage significant trees, as defined in SCCC Section 16.34.030, in the County's Coastal Zone. Per SCCC Section 16.32, a tree removal permit is also required to remove or damage any tree located in a sensitive habitat, as defined by SCCC Section 16.32.040.

3. RESULTS

3.1 Habitat Types

Four habitat types, including non-native grassland, arroyo willow riparian, coast live oak woodland, and ruderal occur within the project site (**Figures 4a-h; Appendix D**). In addition, a portion of the site is developed. Detailed descriptions of each habitat type are presented below.

3.1.1 Non-Native Grassland

- *A Manual of California Vegetation* classification(s): Wild Oats Grassland (*Avena barbata*, *fatua* Semi-natural Herbaceous Alliance) and Annual Brome Grasslands (*Bromus diandrus, hordeaceus – Brachypodium distachyon* Semi-Natural Herbaceous Stands)
- *California Natural Communities List*: Not Sensitive

Throughout California, non-native grasslands typically occur in open areas of valleys and foothills, usually on fine-textured clay or loam soils that are somewhat poorly drained (Holland, 1986). They are dominated by non-native annual grasses and forbs along with scattered native grasses and wildflowers. Small patches of non-native grassland areas, dominated by wild oat (*Avena fatua*) and ripgut brome (*Bromus diandrus*), occur within the upper portion of the project site (**Figures 4a-d**). Approximately 2.11 acres of non-native grassland habitat occur within the project site.

Many wildlife species using non-native grassland for foraging, but some require special habitat features such as cliffs, caves, ponds, or habitats with woody plants for breeding, resting, and escape cover. Common wildlife species found in non-native grasslands include western fence lizard (*Sceloporus occidentalis*), common garter snake (*Thamnophis sirtalis),* western rattlesnake (*Crotalus atrox*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), western harvest mouse (*Reithrodontomys megalotis*), California vole (Microtus californicus), and ground-nesting birds.

3.1.2 Arroyo Willow Riparian

- *A Manual of California Vegetation* classification(s): Arroyo Willow Thickets (*Salix lasiolepis* Shrubland Alliance)
- *California Natural Communities List*: Sensitive

Riparian areas are those plant communities supporting woody vegetation found along rivers, creeks, streams, and canyon bottom drainages. They can range from a dense thicket of shrubs to a closed canopy of large mature trees. Riparian habitat occurs in small, scattered islands in the Upper Rodeo Gulch portion of the project site, where it is supported by Rodeo Gulch Creek (**Figures 4a-e**). The canopy is dense and dominated by arroyo willow (*Salix lasiolepis*), Fremont cottonwood (*Populus fremontii*), western sycamore (*Platanus racemosa*), and American dogwood (*Cornus sericea*) trees. The understory is dominated by California blackberry (*Rubus ursinus*) and poison oak (*Toxicodendron diversilobum*), both native to California. Approximately 0.76 acres of arroyo willow riparian habitat occurs within the project site. Coast live oak dominated areas on the outer edge of this habitat classification are included in this habitat due to their likely dependence upon subsurface hydrology, even though the understory is dominated by annual grasses.

Riparian communities are characterized by unique ecological features that support a wide variety of plant species, stabilize creekbank soils, maintain water quality through filtration, and provide habitat for many

resident and migrant wildlife, particularly birds and herpetofauna. These factors include flooding, rich and productive soils, a water table that is within reach of plant roots, and species of plants and wildlife that are adapted to the timing of fluvial events such as flooding and drought. Riparian corridors also function as linear migration routes for many wildlife species. As a result, riparian forests support a greater diversity of wildlife than any other habitat type in California (Griggs, 2009).

3.1.3 Coast Live Oak Woodland

- *A Manual of California Vegetation* classification(s): Coast Live Oak Woodland (*Quercus agrifolia* Woodland Alliance)
- *California Natural Communities List*: Not Sensitive

Coastal live oak woodlands occur in the more mesic areas of coastal California from Sonoma County south into Baja California. The canopy is dominated by coast live oak trees and the understory is dominated by a mix of native and non-native grasses and forbs, including slender wild oat, ripgut brome, fiesta flower (*Pholistoma auritum*), and miner's lettuce (*Claytonia* sp.). Approximately 0.47 acre of coast live oak woodland occurs within the site (**Figures 4c-d**).

Coast live oak woodland is important habitat to many wildlife species. Oaks provide nesting sites for many avian species and cover for a variety of mammals. Acorns provide an important food source for acorn woodpecker (*Melanerpes formicivorus*), western scrub jay (*Aphelocoma californica*), and black-tailed deer (*Odocoileus hemionus columbianus*). Other common wildlife species found in the coast live oak woodland are raccoon (*Procyon lotor*), Nuttall's woodpecker (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), bobcat (*Lynx rufus*), and coyote (*Canis latrans*). Generally, red-tailed hawks (*Buteo jamaicensis*) and great-horned owls (*Bubo virginianus*) nest and roost in coast live oak trees.

3.1.4 Ruderal

- *A Manual of California Vegetation* classification(s): Wild Oats and Annual Brome Grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance)
- CDFW *California Natural Communities List*: Not Listed

Ruderal areas are those areas which have been developed or have been subject to historic and ongoing disturbance by human activities and are devoid of vegetation or dominated by non-native and/or invasive weed species, including slender wild oat and ripgut brome. Approximately 2.28 acres of sparsely vegetated ruderal habitat occur throughout the project site (**Figures 4a** and **4c-f**).

Ruderal areas have low biological value because they are generally dominated by non-native plant species and consist of relatively low-quality habitat from a wildlife perspective. Common wildlife species which do well in urbanized and disturbed areas that may occur within the ruderal habitat include American crow (*Corvus brachyrhynchos*), Steller's jay (*Cyanocitta stelleri*), striped skunk (*Mephitis mephitis*), scrub jay, European starling (*Sturnus vulgaris*), western fence lizard, and rock dove (*Columba livia*).

3.1.5 Developed

- *A Manual of California Vegetation* classification(s): None
- CDFW *California Natural Communities List*: Not Listed

Much of the project site is developed with buildings and paved road (**Figures 4a-h**). These areas are devoid of vegetation and do not provide habitat for wildlife species. Approximately 1.44 acres of development occur within the project site.

3.2 Pipeline Bridge Habitat Description

The pipeline bridge repair component of the Upper Rodeo Gulch Trunkline Rehabilitation Project traverses an ephemeral tributary to Rodeo Gulch Creek. Although the habitat along this portion of the project is consistent within the classification of arroyo willow riparian, as defined above, this portion of the project spans an ephemeral tributary and will require vegetation removal, therefore a more detailed description of the cross-section of this component is described below in **Table 1**. The entire span of the bridge rehabilitation component is approximately 145 linear feet.

Table 1. Pipeline Bridge Riparian Habitat Description

Length (ft)	Elevation (ft)	Canopy (Dominant in bold)	Understory (Dominant in bold)	Notes
0-26	0-7	**Coast live oak**, California bay	**English ivy (*Hedera helix*)**, poison oak, California blackberry, Himalayan blackberry (*Rubus armeniacus*)	North bank
26-58	7-15	**Arroyo willow**, Coast live oak, California bay	**Poison oak,** Carex sp.	North bank
58-87	15-18.5	**Arroyo willow**	**California blackberry, Himalayan blackberry**, Carex sp.	North bank to bottom of channel
87-97	18.5	**Arroyo willow**	**California blackberry, Himalayan blackberry**	Bottom of channel
97-114	18.5	**Arroyo willow**	**Carex sp.**, knotweed (*polygonum* sp.)	Bottom of channel, thalweg, no surface water present
114-144	18.5-0	**California walnut, Fremont cottonwood**	**California blackberry, Himalayan blackberry**, poison oak	South bank, steep gradient to top of south bank

3.3 Sensitive Habitats

Two sensitive habitats, arroyo willow riparian and coast live oak woodland, occur within the project site (**Figures 4a-e**). In addition, potential waters of the U.S. and/or state occur adjacent to the site and designated critical habitat for tidewater goby occurs approximately 200 feet from the project site. The following sections provides an overview of these habitats and identifies which regulatory agencies may take jurisdiction over them.

3.3.1 Arroyo Willow Riparian

The rich soils and presence of water that make riparian ecosystems so diverse also function as productive land for agriculture and are desirable locations of development. As a result, much of the historic riparian habitat within California has been lost to agricultural conversion, urbanization, and flood control activities. To combat this habitat loss, CDFW supports a policy of minimizing the destruction or degradation of riparian habitat. Riparian habitat is considered sensitive and is subject to the jurisdiction of CDFW under Section 1602 of the California Fish and Game Code. In addition, riparian habitat is considered sensitive under SCCC Section 16.32.040 and the arroyo willow floristic alliance occurring within riparian areas is considered sensitive under CDFW's *California Natural Communities List* (CDFW, 2022a). Riparian habitat within the project site does not occur within the Coastal Zone and, therefore, is not considered ESHA.

3.3.2 Riparian Corridor

SCCC Section 16.30.030 defines Riparian Corridor as:

1. Lands within a stream channel, including the stream and the area between the mean rainy season (bankfull) flowlines;
2. Lands extending 50 feet (measured horizontally) out from each side of a perennial stream. Distance shall be measured from the mean rainy season (bankfull) flowline;
3. Lands extending 30 feet (measured horizontally) out from each side of an intermittent stream. Distance shall be measured from the mean rainy season (bankfull) flowline;
4. Lands extending 100 feet (measured horizontally) from the high water mark of a lake, wetland, estuary, lagoon or natural body of standing water;
5. Lands within an arroyo located within the urban services line, or the rural services line;
6. Lands containing a riparian woodland.

The Riparian Corridor within and immediately adjacent to the project site includes a 50-foot buffer of Rodeo Gulch Creek, a 30-foot buffer of the ephemeral tributary to Rodeo Gulch Creek, a 100-foot buffer of Corcoran Lagoon, and all arroyo willow riparian habitat. Approximately 0.85 acres of the project site are located within the Riparian Corridor for Rodeo Gulch Creek.

3.3.3 Coast Live Oak Woodland

Coast live oak woodland is considered a sensitive habitat under SCCC Section 16.32.040. Development within this habitat is subject to the approval of the County. Coast live oak woodland within the project site does not occur within the Coastal Zone and, therefore, is not considered ESHA.

3.3.4 Critical Habitat

The Service has designated final critical habitat for tidewater goby within Cocoran Lagoon south of Portola Drive, located adjacent to, but not within the project site. Impacts to critical habitat are subject to the Service's jurisdiction. Tidewater goby critical habitat may also be considered ESHA subject to the County's jurisdiction under its Local Coastal Program.

3.3.5 Waters of the U.S. and/or State

Rodeo Gulch Creek, located adjacent to the project site, and the unnamed ephemeral tributary under the pipeline bridge repair, may be considered waters of the U.S. and/or state potentially under the jurisdiction of the ACOE and/or the RWQCB under Sections 404 and/or 401 of the CWA. Waters of the U.S. and/or

state are also considered sensitive under SCCC Section 16.32.040 and, where they occur within the Coastal Zone adjacent to (but not within) the Lower Rodeo Gulch area of the project site, may be considered ESHA subject to the County's jurisdiction under its Local Coastal Program.

3.4 Protected Trees

As identified above in the project description, several trees will be removed to facilitate project construction (**Table 3**). Per SCCC Section 16.34.040, no person shall do, cause, permit, aid, abet, suffer, or furnish equipment or labor to remove, cut down, or trim more than one-third of the green foliage of, poison, or otherwise kill or destroy any significant tree as defined in this chapter within the Coastal Zone until a "significant tree" removal approval for the project has been obtained. SCCC Section 16.34.030 defines a "significant tree" as follows:

1. Within the urban services line or rural services line, any tree which is equal to or greater than 20 inches dbh. (approximately five feet in circumference); any sprout clump of five or more stems each of which is greater than 12 inches dbh. (approximately three feet in circumference); or any group consisting of five or more trees on one parcel, each of which is greater than 12 inches dbh. (approximately three feet in circumference).

2. Outside the urban services line or rural services line, where visible from a scenic road, any beach, or within a designated scenic resource area, any tree which is equal to or greater than 40 inches dbh. (approximately 10 feet in circumference); any sprout clump of five or more stems, each of which is greater than 20 inches dbh. (approximately five feet in circumference); or, any group consisting of 10 or more trees on one parcel, each greater than 20 inches dbh. (approximately five feet in circumference).

3. Any tree located in a sensitive habitat as defined in Chapter 16.32 SCCC.

Table 3. Rodeo Gulch Tree Removal

Common Name	Scientific Name	dbh	Location	Surrounding Habitat	Significant Tree Per SCCC (Y/N)
Coast live oak	*Quercus agrifolia*	45	Upper Rodeo Gulch Trunkline	Arroyo Willow Riparian	Y
Coast live oak	*Quercus agrifolia*	14	Lower Rodeo Gulch Trunkline	Ruderal	N
Blue gum Eucalyptus	*Eucalyptus globulus*	11	Upper Rodeo Gulch Trunkline	Arroyo Willow Riparian	Y
Acacia	*Acacia* sp.	22	Lower Rodeo Gulch Trunkline	Ruderal	N

Acacia	*Acacia* sp.	20	Lower Rodeo Gulch Trunkline	Ruderal	N
Box elder	*Acer negundo*	9	Lower Rodeo Gulch Trunkline	Ruderal	N
Ponderosa pine	*Pinus ponderosa*	9	Lower Rodeo Gulch Trunkline	Ruderal	N

3.5 Special-Status Species

Published occurrence data within the project area and surrounding U.S. Geological Survey quadrangles were evaluated to compile a table of special-status species known to occur in the vicinity of the project site (see *Methods* and **Appendix C**). Each of these species was evaluated for their likelihood to occur within and immediately adjacent to the site. The special-status species that are known to or have been determined to have a moderate or high potential to occur within or immediately adjacent the project site are listed in **Table 2** and are discussed below. In addition, several species which were determined to have a low potential to occur within the project site and are therefore unlikely to be impacted by the project are discussed below due to their local significance and presence of suitable or marginally suitable habitat for them within the project site. All other species which are assumed unlikely to occur or have a low potential to occur within the project site based on the species-specific reasons presented in **Appendix C** are not discussed further.

Table 2. Known or Potential Presence of Special-Status Species

Common Name	Scientific Name	Status Designation	Potential Occurrence
Pallid Bat	*Antrozous pallidus*	SSC[3]	Moderate
Townsend's Big-Eared Bat	*Corynorhinus townsendii*	SSC	Moderate
San Francisco Dusky-Footed Woodrat	*Neotoma macrotis annectens*	SSC	High
Raptors and Other Protected Avian Species	--	N/A	Moderate
Tidewater Goby	*Eucyclogobius newberryi*	FE/SSC	Potential Adjacent
Santa Cruz Black Salamander	*Aneides niger*	SSC	Moderate
Western Pond Turtle	*Emys marmorata*	SSC	Moderate
Giant Salamander	*Dicamptodon ensatus*	SSC	Moderate

3.5.1 Special-Status Species Potentially Occurring Within or Adjacent to the Project Site

Pallid Bat

The Pallid bat (*Antrozous pallidus*) is a CDFW species of special concern. It is a year-round resident in California. This species of bat occurs in a wide variety of habitats including grasslands, shrublands, arid desert areas, oak savanna, coastal forested areas, and coniferous forests of the mountain regions of California and forests ranging from sea level up through mixed conifer forests. Pallid bats are most common in open, dry habitats with rocky areas for roosting. Day roosts of this species include caves, crevices, mines, and occasionally hollow trees and buildings. This species seems to prefer rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Pallid bats make use of similar structures for night

[3] CSC: CDFW Species of Special Concern; FE: listed as endangered under ESA.

roosting and will use more open sites such as eaves, awnings, and open areas under bridges for feeding roosts. Pallid bats feed on large insects (20 to 70 mm in length). Foraging takes place over open ground, at heights generally not greater than 7.5 feet, although prey is most often caught on the ground. Jerusalem crickets, scorpions and beetles make up most of the diet of pallid bats in central California. Copulation occurs in the fall from October through December. Females store the sperm and ovulation occurs in the following spring. Parturition timing is determined by local climate and embryonic development usually takes about nine weeks, with birth occurring in May or June. Twins are the norm in northern California, but in other areas they are known to have triplets. Maternity colonies range from 20 to 200 individual adult bats. Males roost in much smaller groupings (Hermanson and O'Shea, 1983).

The CNDDB reports two non-specific occurrences of the pallid bat within the quadrangles reviewed. One occurrence is a historical (1928) occurrence which overlaps the project site. The other occurrence, reported in 2003, is 4.8 miles from the project site. Suitable foraging and night roosting habitat and marginally suitable day and maternity roosting habitat for this species is present within riparian and oak woodland areas of the project site.

Townsend's Big-Eared Bat

Townsend's big-eared bat (*Corynorhinus townsendii*) is a CDFW species of special concern. Townsend's big-eared bat is a year-round resident in California occurring from low desert to mid-elevation montane habitats. It is found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Townsend's big-eared bats typically roost during the day in caves and mines but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees. This species hibernates in mixed sex aggregations of a few to several hundred individuals. Hibernation is more prolonged in colder areas. This species arouses periodically and moves to alternative roosts and actively forages and drinks throughout the winter. Single young is born per year between May and July.

The CNDDB reports two historical (1945), non-specific occurrences of Townsend's big-eared bat within the quadrangles reviewed, one overlapping the project site. Suitable foraging and night roosting habitat for this species is present within riparian and oak woodland areas of the project site; however, suitable habitat for day, colonial, or maternal roots is not available within the site.

San Francisco Dusky-Footed Woodrat

The San Francisco dusky-footed woodrat (*Neotoma macrotis annectens;* SFDFW) is a CDFW species of special concern. This is a subspecies of the dusky-footed woodrat *(Neotoma macrotis)*, which is common to oak woodlands and other forest types throughout California. Dusky-footed woodrats are frequently found in forest habitats with moderate canopy cover and a moderate to dense understory, including riparian forests; however, they may also be found in chaparral communities. Relatively large nests are constructed of grass, leaves, sticks, and feathers and are built in protected spots, such as rocky outcrops or dense brambles of blackberry and/or poison oak. Typical food sources for this species include leaves, flowers, nuts, berries, and truffles. Dusky-footed woodrats may be a significant food source for small- to medium-sized predators. Populations of this species may be limited by the availability of nest material. Within suitable habitat, nests are often found in close proximity to each other.

The CNDDB reports only one occurrence of SFDFW within the quadrangles reviewed, located approximately 3.9 miles from the project site; however, SFDFW is known to occur throughout the San Francisco Bay Area, and the project site offers high quality habitat for this species.

California Giant Salamander
The California giant salamander (*Dicamptodon ensatus*; CGS) is a California species of special concern. This species is genetically distinct from the coastal giant salamander (*Dicamptodon tenebrosus*) found north of Sonoma County; however, according to Goode (1989) a hybrid zone exists between the two species approximately 10 kilometers north of Gualala in Mendocino County. CGS occur in wet coastal forests in or near clear, cold permanent, and semi-permanent streams and seepages. Adults can be terrestrial but where permanently flowing streams are available, adults may retain gills for an aquatic adult stage (neoteny). Adults are occasionally found surface active or under cover objects in wet conditions (Petranka 1998). Eggs are laid during spring in concealed locations several feet below the surface in cold, slowly flowing water in springs, channels, under streambanks, and beneath rocks and coarse woody debris in stream bottoms (Nussbaum et al. 1983, Stebbins 1985). Water, preferably cold and flowing, is necessary for egg-laying sites and for the aquatic larval and adult forms (Nussbaum et al. 1983, Stebbins 1985). Aquatic adults and larvae hide within spaces between rocks in streambeds. Terrestrial adults are found under surface litter and in tunnels underground (Nussbaum et al. 1983, Stebbins 1985). Densities of 87 larvae per 30 linear meters (100 feet) of stream have been reported (Nussbaum and Clothier 1973). CGS breeds from March to May, with peak in May. Adults have been found associated with nests (Nussbaum 1969). In some areas, larvae will transform to terrestrial adult form after 1 to 2 years (Nussbaum et al. 1983).

The CNDDB reports 34 occurrences of California giant salamander within the quadrangles reviewed, the closest is approximately one mile northwest of the survey area. Potential foraging habitat and protective cover for this species is present with the adjacent Rodeo Gulch drainage, within and immediately adjacent to the active channel.

Santa Cruz Black Salamander
The Santa Cruz black salamander (*Aneides niger*) is a CDFW species of special concern. This species occurs only in San Mateo, Santa Cruz, and (western) Santa Clara Counties in California. Santa Cruz black salamanders are found under rocks near streams, in talus, and under damp logs and other objects in mixed deciduous woodland, coniferous forest, and coastal grassland. Reproduction is terrestrial; females lay eggs in moist cavities below ground in July and August. Females stay with eggs until they hatch; young develop in the egg and hatch directly into tiny terrestrial salamanders. Santa Cruz black salamanders do not breathe through lungs, but instead conduct respiration through their skin and the tissues lining their mouth. This requires that they live in damp environments on land and to move about on the ground only during times of high humidity.

The CNDDB reports 30 occurrences of Santa Cruz black salamander within the quadrangles reviewed, the closest is approximately two miles west of the survey area. Potential foraging habitat and protective cover for this species is present with the adjacent Rodeo Gulch drainage, within and immediately adjacent to the active channel.

Western pond turtle
Western pond turtles (*Emys marmorata*), a CDFW species of special concern, are uncommon to common in permanent or nearly permanent aquatic resources in a wide variety of habitats throughout California, west of the Sierra-Cascade crest and are absent from desert regions, except in the Mojave Desert along the

Mojave River and its tributaries. Elevation range extends from near sea level to 1430 meters (4690 feet). Western pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. The home range of western pond turtles is typically quite restricted; however, ongoing research indicates that in many areas, turtles may leave the watercourse in late fall and move into upland habitats where they burrow into duff and/or soil and overwinter (Holland, 1994). However, western pond turtles remain active year-round and may move several times during the course of overwintering. The time spent in the terrestrial habitat appears highly variable; in southern California western pond turtles may remain in these sites for only a month or two. In pond and lake habitats, however, some turtles remain in the pond during the winter (Holland, 1994). Additionally, during the spring or early summer, females move overland for up to 100 meters (325 feet) to find suitable sites for egg-laying. Nests are typically excavated in compact, dry soils in areas characterized by sparse vegetation, usually short grasses or forbs (Holland, 1994). Three to 11 eggs are laid from March to August depending on local conditions (Ernst and Barbour, 1972). The western pond turtle is not known to be territorial, but aggressive encounters, including gesturing and physical combat (Bury and Wolfheim, 1973), are common and may function to maintain spacing on basking sites and to settle disputes over preferred spots. This species is considered omnivorous and food sources include aquatic plant material, beetles, and a wide variety of aquatic invertebrates. Fishes, frogs, and carrion have also been reported among their food (Stebbins, 1972).

The CNDDB reports 17 occurrences of western pond turtle within the quadrangles reviewed, the closest is approximately 1 mile east of the survey area. Potential foraging habitat and protective cover for this species is present with the adjacent Rodeo Gulch drainage, within and immediately adjacent to the active channel. Additionally, riparian, non-native grassland, and coast live oak woodland could provide nesting habitat for western pond turtles if present within Rodeo Gulch.

Birds of Prey and Birds Listed by the MBTA

Birds of prey, their nests, and other nesting birds are protected under California Fish and Game Code and the MBTA. While the life histories of these species vary, overlapping nesting and foraging similarities allow for their concurrent discussion. Most birds of prey are breeding residents throughout most of the wooded portions of the state. Stands of live oak, riparian deciduous, or other forest habitats, as well as open grasslands, are used most frequently for nesting. Breeding occurs February through September, with peak activity May through July. Prey for these species include small birds, small mammals, and some reptiles and amphibians. Many birds of prey species hunt in open woodland and habitat edges.

Various species of raptors, such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus),* American kestrel (*Falco sparverius*), great horned owl (*Bubo virginianus*), and turkey vulture (*Cathartes aura*), as well as other avian species, have a potential to nest within the trees present within the project site.

Tidewater Goby

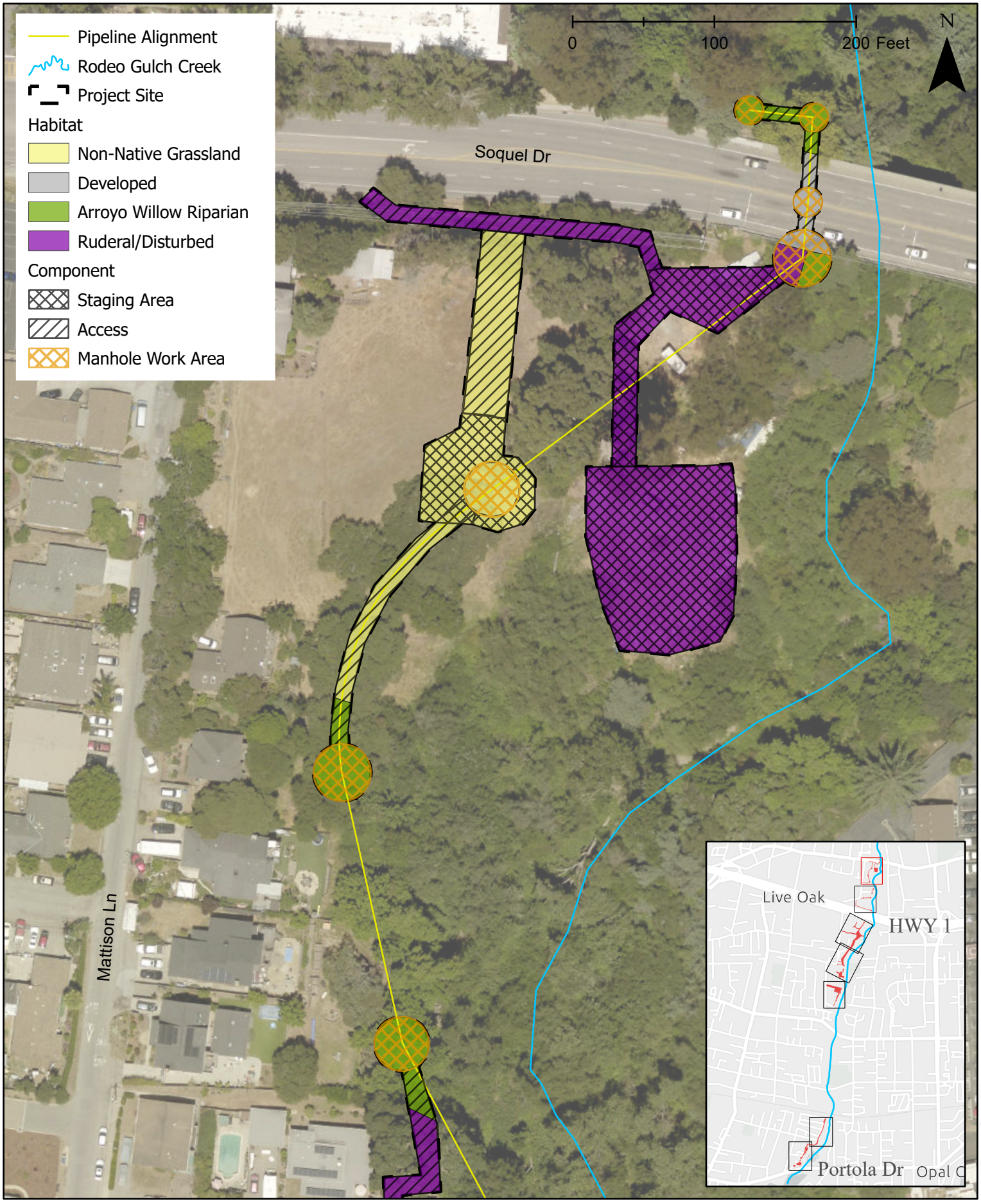
The tidewater goby is a federally Endangered species and a CDFW species of special concern. The tidewater goby is a small native goby found along the coast of California from the Smith River in Del Norte County to Agua Hedionda Lagoon in San Diego County. Local records of this species from the California Academy of Sciences show presence in the Paper Mill Creek and Rodeo Lagoon, the mouth of the Corte Madera Creek, in the vicinity of Lake Merced in San Francisco, and San Pablo Bay adjacent to the Sacramento-San Joaquin Estuary. Individuals of this species are in different developmental stages

throughout the year. The spawning peak of this species in Rodeo Lagoon can be separated into two periods: from late March through July, and from late August through November. The male tidewater goby digs a vertical burrow approximately 100 to 200 mm into the sandy bottom in water 25 to 50 cm deep, which the male then guards after the female completes egg deposition. Mollusks, insects, and crustaceans are thought to be the primary food for the tidewater goby.

The CNDDB reports sixteen occurrences of tidewater goby within the quadrangles reviewed, including a 1996 occurrence which overlaps the project site near the mouth of the Rodeo Gulch Creek. Suitable habitat for this species is present adjacent to the project site in the lower reaches of the stream. Tidewater goby has the potential to occur adjacent to but not within the project site.

3.5.2 Special-Status Amphibian Species Unlikely to Occur within the Project Site

The survey area is within the range and adjacent to potentially suitable habitat for two special-status amphibian species, foothill yellow-legged frog (*Rana boylii*, FYLF), and California red-legged frog (*Rana draytonii*, CRLF). Although these two species have known occurrences within five miles of the project site, they were determined to have a low potential to occur within the project site or to be impacted by the project. As detailed for each species in **Appendix C**, the project site provides suitable habitat for these species mostly in scattered pockets of riparian and oak woodland vegetation; remaining, undeveloped areas of the project site provide only marginal habitat or no habitat for these species. Most of the project site, which is developed or disturbed, provides little to no habitat for these species. Although there are known occurrences of these species within five miles of the project site, the CNDDB does not report any occurrences of these species within the Rodeo Gulch Creek, which is surrounded by urban development and major roads and highways. As a result, the project site is isolated from all known occurrences of these species and is fragmented from other habitat for these species. Additionally, DD&A discussed species presence with local expert, Gary Kittleson, who disclosed that neither of these species have been observed in this reach of Rodeo Gulch during the extensive survey work he had conducted (Gary Kittleson, personal communication, September 27, 2022). Therefore, these species have a low potential to occur within the project site and are unlikely to be impacted by the project.



Upper Rodeo Gulch Habitat Types

Date
11/30/2022

Scale
1 inch = 90 feet

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
4a

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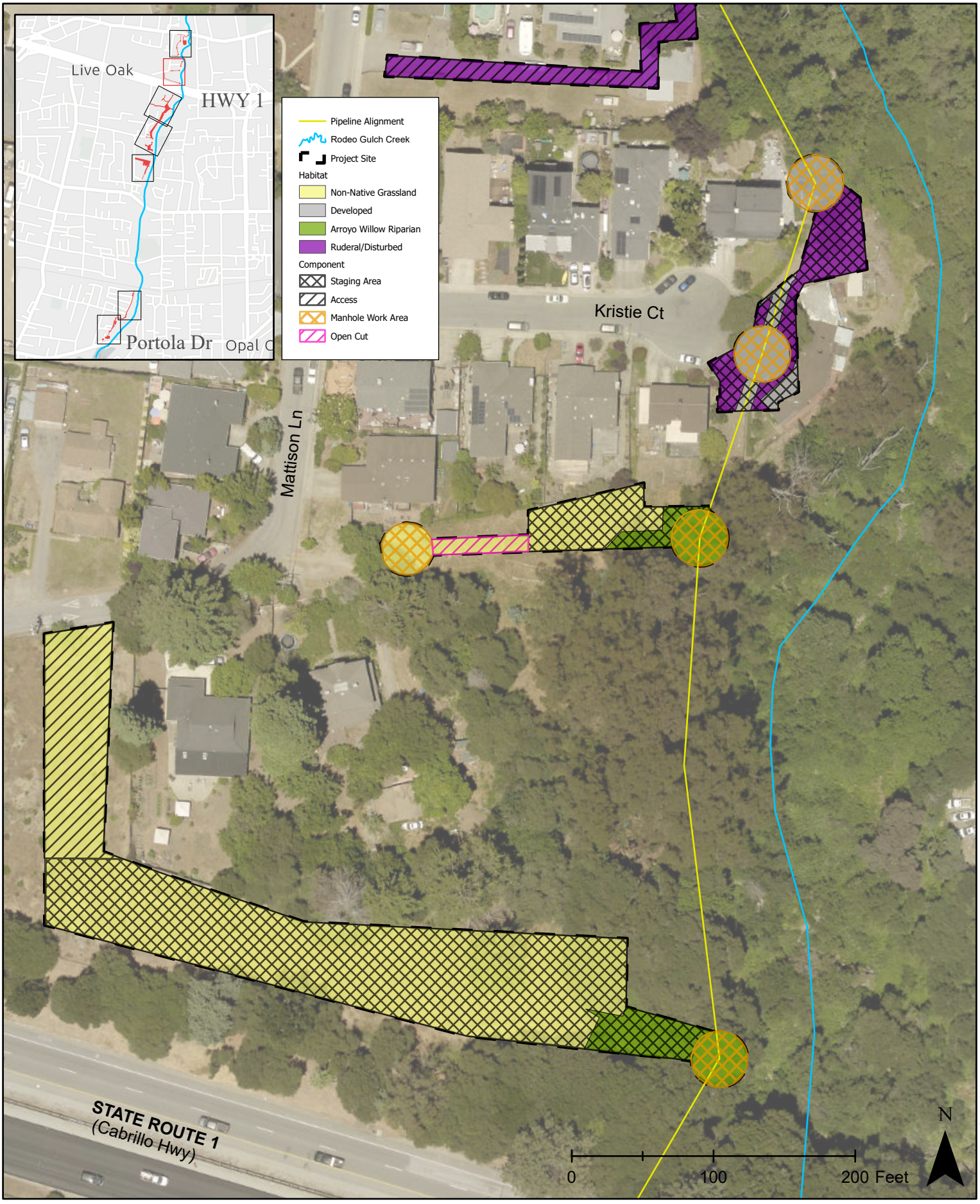

Upper Rodeo Gulch Habitat Types

Date
11/30/2022

Scale
1 inch = 90 feet

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
4b

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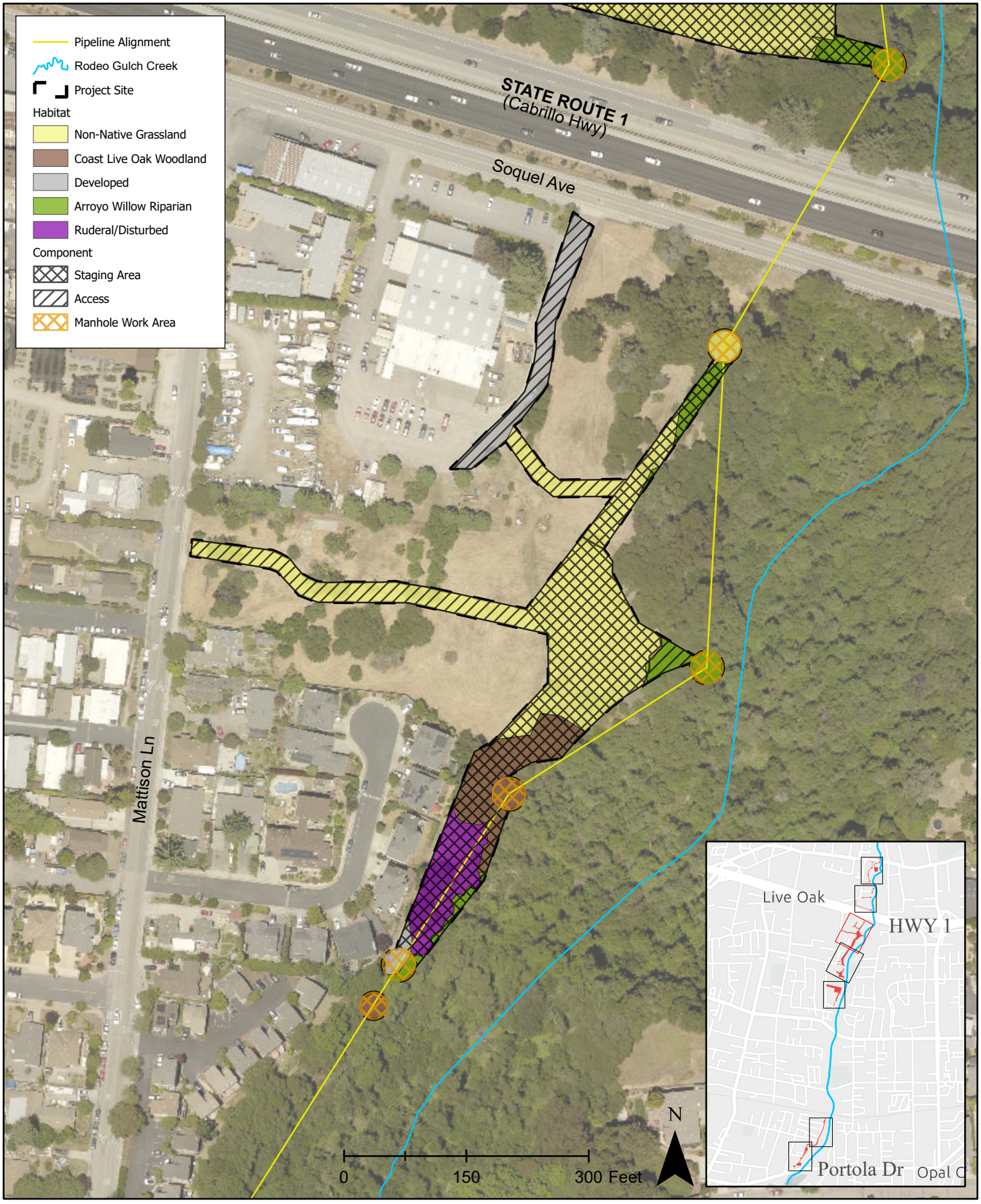

Upper Rodeo Gulch Habitat Types

Date	Scale	Figure
11/30/2022	1 inch = 150 feet	4c

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

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Upper Rodeo Gulch Habitat Types

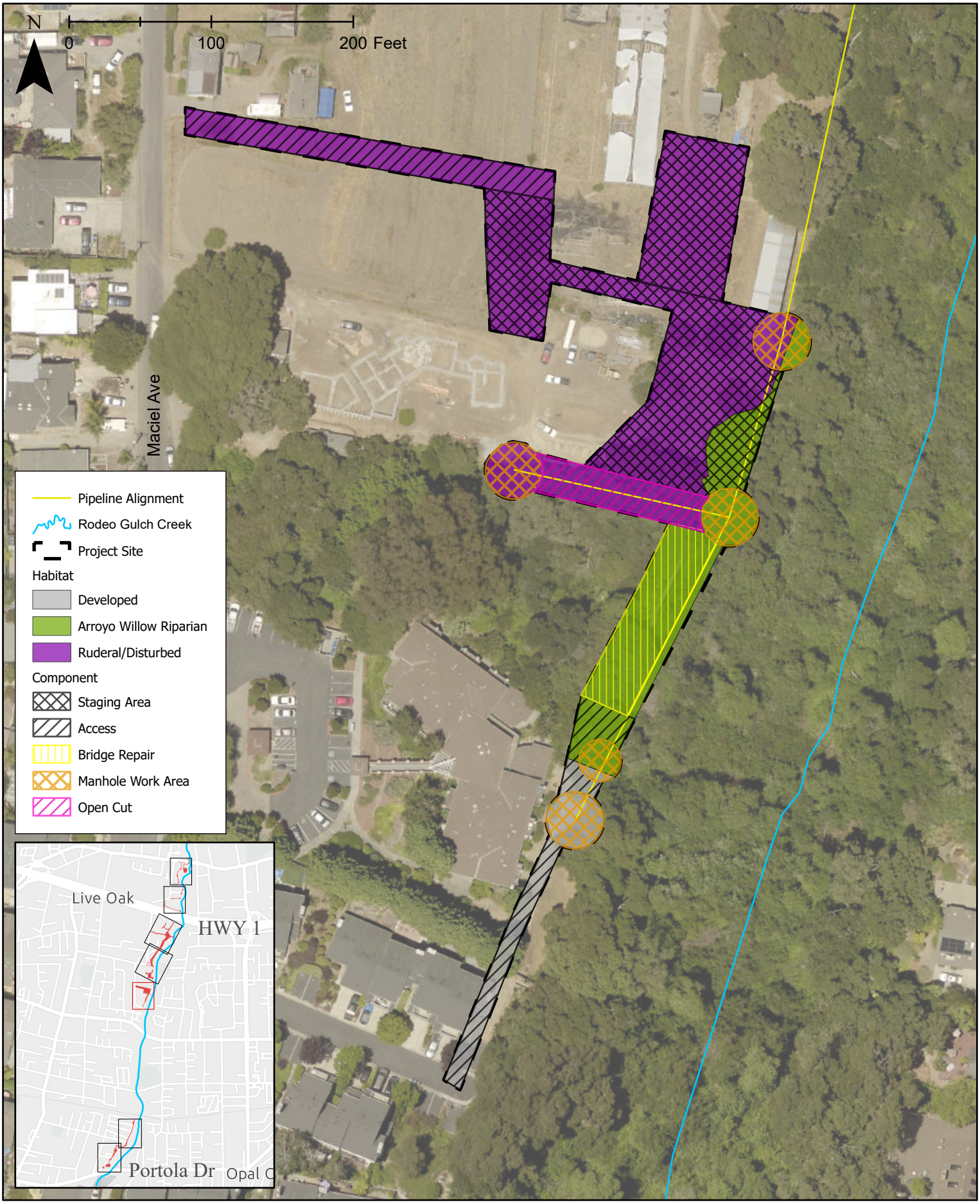
Date
11/30/2022

Scale
1 inch = 150 feet

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
4d

Path: C:\GIS\2020-04 Rodeo Gulch\Map Products\2020-04 Rodeo Gulch\2020-04 Rodeo Gulch.aprx



Upper Rodeo Gulch Habitat Types

Date
11/30/2022

Scale
1 inch = 90 feet

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
4e

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Lower Rodeo Gulch Habitat Types

Date	Scale	Figure
11/30/2022	1 inch = 90 feet	4f

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

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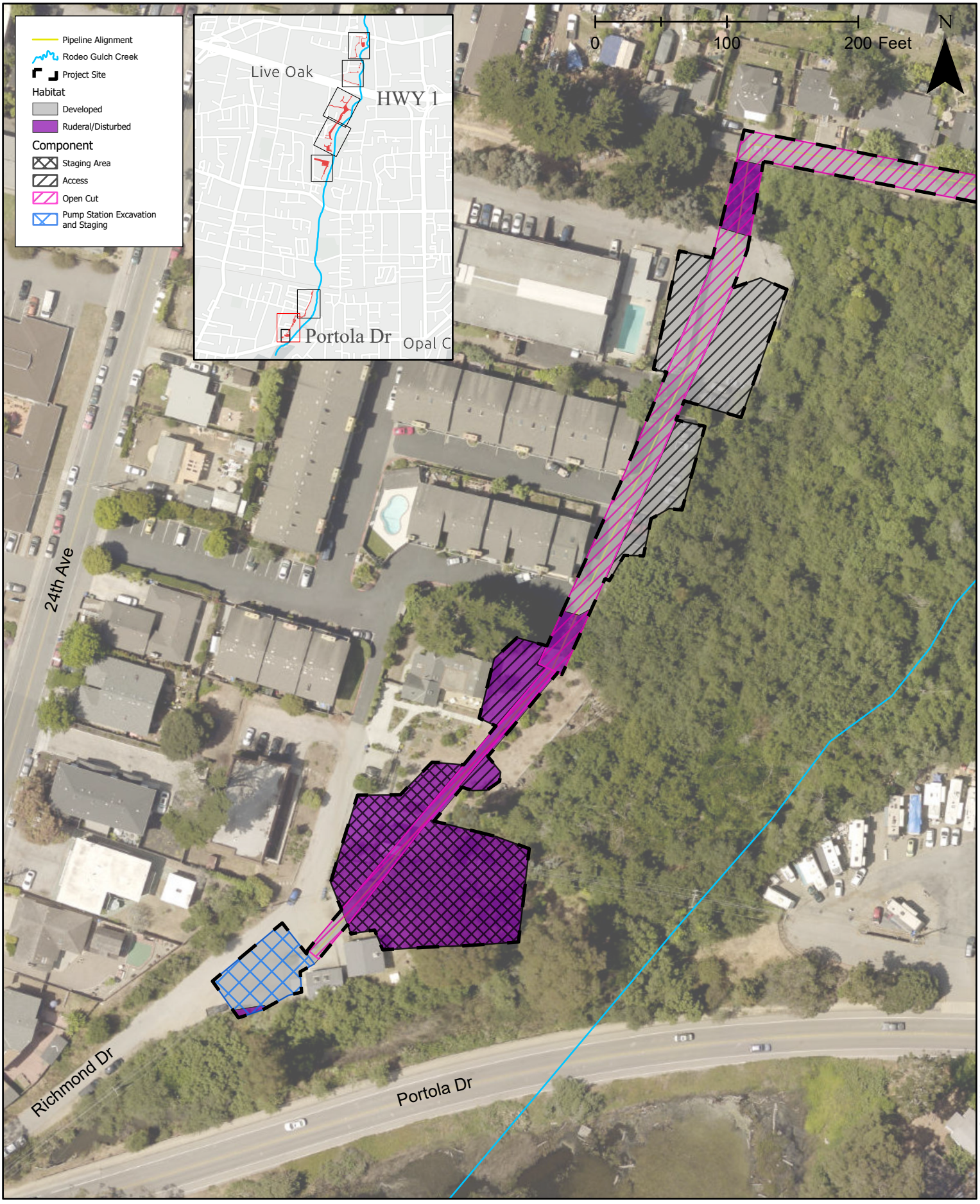

Lower Rodeo Gulch Habitat Types

Date	Scale	Figure
11/30/2022	1 inch = 90 feet	4g

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

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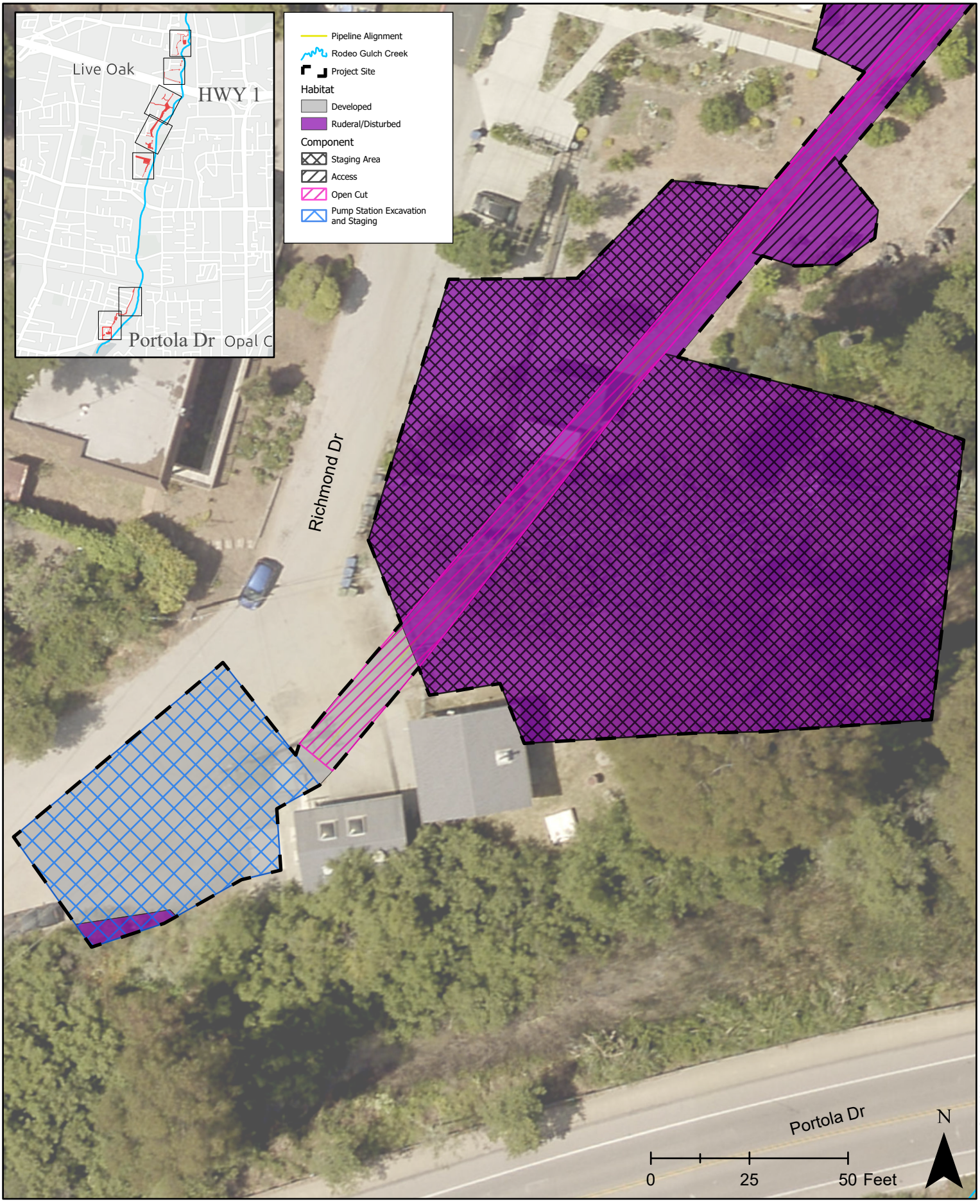

Lower Rodeo Gulch & Pump Station Habitat Types

Date
11/30/2022

Scale
1 inch = 30 feet

Denise Duffy & Associates, Inc.
Planning and Environmental Consulting

Figure
4h

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4. IMPACT ANALYSIS

4.1 Project Design Elements for Impact Reduction

SCCSD included several elements in the design of the project to reduce impacts to the arroyo willow riparian habitat associated with Rodeo Gulch Creek. Specific design elements that were included to reduce the potential for impact include:

1. Most of the rehabilitation Upper Rodeo Gulch will be completed using CIPP lining rather than open cut trench pipeline replacement. This rehabilitation methodology significantly reduces the area of disturbance to an approximately 40-foot diameter circle around each entry or exit manhole instead of the entire alignment of the pipeline.

2. Staging, stockpiling, and access corridors for the majority of the project have been confined to developed areas or non-native grassland/ruderal habitats, avoiding sensitive arroyo willow riparian habitat wherever possible.

3. Scaffolding installation required for the bridge rehabilitation component within the Upper Rodeo Gulch Rehabilitation Project will be performed by hand, no heavy machinery will enter the tributary to Rodeo Gulch Creek. Vegetation removal will be confined to the minimum amount necessary to install scaffolding. Sandblasting tarps, or other containment screens, will be placed on the scaffolding, bridge, and ground to contain debris related to the bridge rehabilitation. The bridge rehabilitation will be performed during the dry season when it is less likely that surface water will be present. No fill or dredging will be required to perform the bridge rehabilitation.

4. The project has been designed to avoid all arroyo willow riparian habitat and/or any other sensitive habitat within the Coastal Zone.

4.2 Impact Thresholds

The following section describes potential impacts to sensitive biological resources that may result from the project. In accordance with Appendix G of CEQA Guidelines, an impact is considered to be significant and require mitigation if it would result in any of the following:

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 CDFW or the Service;

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or the Service;

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

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites;

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

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.

Recommendations are included below to avoid or minimize impacts to sensitive biological resources.

4.3 Impacts and Recommendations

Impact BIO-1: 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 CDFW or the Service.

Santa Cruz black salamanders, California giant salamanders, and western pond turtles, have the potential to occur within Rodeo Gulch Creek and the associated arroyo willow riparian habitat within and adjacent to the project site. Removal of vegetation during construction for heavy machinery access to the manhole work areas, scaffolding installation for pipeline bridge rehabilitation, and in areas of conventional trenching for the replacement sewer line could result in direct and indirect impacts to these species. Direct impacts include mortality of individuals or nests, while indirect impacts include loss of habitat for these species. Implementation of recommendations BIO-1 through BIO-8 would reduce the potential for impacts.

SFDFW have the potential to occur within the arroyo willow riparian and coast live oak woodland habitat within and adjacent to the project site. Removal of vegetation during construction for heavy machinery access to manhole work areas could result in direct and indirect impacts to SFDFW. Direct impacts include mortality of individuals or nests, while indirect impacts include loss of habitat. Implementation of recommendations BIO-1 through BIO-9, would reduce the potential for impacts.

The project site provides potential nesting habitat for birds of prey and birds listed by the MBTA. The project site contains suitable nesting habitat for ground and tree-nesting species, particularly within the riparian areas associated with Rodeo Gulch Creek, and trees and shrubs immediately adjacent to the project site. Nests could become established in the vegetation to be removed before construction begins. Construction-related activities that occur within the general nesting season (February through August) have a potential to result in direct and indirect take of an active nest. Construction activities that could result in direct impacts to nesting birds include vegetation and tree removal. Indirect impacts that could occur during construction include an increase in human activity, construction noise and dust in the immediate vicinity of an active nest that could result in significant harassment and nest abandonment, causing take of the nest. Therefore, there may be a potential for impacts to occur to nesting birds, particularly during the general nesting season of February 1 through August 31. Implementation of recommendations BIO-1 through BIO-8, and BIO-10 would reduce the potential for impacts to nesting birds of prey and birds listed by the MBTA.

The project site provides suitable habitat for special-status bat species identified above. Suitable foraging and night roost habitat for these species is present within the project site; however, suitable habitat for day, colonial, or maternal roots is only available for pallid bat. Construction activities, including vegetation removal, may result in direct and indirect impacts to these species if these species are using the site for day, night, or maternity roosts. Direct impacts include mortality of individuals or roosts, while indirect impacts include loss of habitat. Implementation of recommendations BIO-1 through BIO-8, and BIO-11 would reduce the potential for impacts to special-status bat species.

Tidewater goby has the potential to occur directly adjacent to the project site within Corcoran Lagoon, south of Portola Drive. Construction activities have the potential to result in erosion, sedimentation, and accidental spills of hazardous materials into Rodeo Gulch Creek which can flow downstream and pollute designated critical habitat for this species. Impacts can be avoided with implementation of recommendations BIO-1, and BIO-12 through BIO-15.

BIO-1 Every individual working on the Project must attend biological awareness training prior to working on the job site. The training shall be delivered by a qualified biologist and shall include at minimum information regarding the following:

a. Location and identification of sensitive habitats and all special-status species with potential to occur in the project area including information specific to identifying the special-status species identified above, the habitat for these species, and the project specific measures being implemented to protect these species.

b. The importance of avoiding impacts to special-status species and their habitat, and the steps necessary if any special-status species is encountered at any time.

c. Identification of the limits of work, and project-specific avoidance measures and permit conditions that must be followed.

BIO-2 Disturbance of riparian vegetation and removal of native trees within the riparian corridor shall be avoided to the maximum extent possible.

BIO-3 Native vegetation that cannot be avoided shall be cut at ground level rather than removed by the roots when possible.

BIO-4 Prior to commencement of construction, high visibility fencing and/or flagging shall be installed, with the assistance of a qualified biologist, to indicate the limits of work and the boundaries of sensitive habitat areas to be avoided.

a. The limits of work shall be designated to avoid impacts to the surrounding riparian corridor, and other sensitive habitats to the maximum extent possible and maximize native tree and shrub retention.

b. No work-related activity including equipment staging, vehicular access, grading and/or vegetation removal shall be allowed outside the designated limits of work.

BIO-5 If any special-status species is identified in the project impact area at any time prior to or during construction, work shall cease immediately in the vicinity of the individual. The animal shall either be allowed to move out of harm's way on its own or a qualified biologist shall move the animal out of harm's way to a safe relocation site pursuant to all species-specific restrictions and regulations.

BIO-6 During initial clearing, grubbing, and grading within the riparian corridor, a qualified biologist shall be present to conduct daily monitoring activities to ensure compliance with measures are in place for protection of special status species that may be encountered. After initial clearing,

grubbing and grading has been completed, an alternate construction monitor may be trained and designated for execution of daily monitoring activities.

BIO-7 Daily monitoring by the project biologist or construction monitor shall occur for the duration of project construction within the arroyo willow habitat associated with Rodeo Gulch Creek. Daily monitoring activities shall include the following at minimum:

a. Monitoring the work area for the presence of special-status species and verifying that individuals are properly relocated out of harm's way as needed.

b. Monitoring the exclusionary fences at the project site to verify good working condition and prevent wildlife entrapment.

c. Checking under all equipment for wildlife before use.

d. Verifying that at the end of each workday, all excavations shall be secured with a cover, or a ramp installed to prevent wildlife entrapment.

e. All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling.

BIO-8 During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.

BIO-9 To protect San Francisco dusky-footed woodrat, a qualified biologist shall implement the following protection measures:

a. Within two weeks prior to commencement of development activities (including clearing and grubbing) a qualified biologist shall survey the project disturbance area to identify any woodrat nest locations that may be affected by the proposed development. All woodrat nests within the construction impact area and a 25-foot buffer shall be clearly flagged.

b. If no woodrat nests are found during the survey, no further avoidance and minimization measures for this species are necessary.

c. If woodrat nests are found, the construction contractor shall avoid the nests to the extent feasible by installing a 25-foot buffer with protective fencing or other material that shall prohibit encroachment. A reduction in the size of this buffer, or encroachment into this buffer, may be allowed if the biologist determines that microhabitat conditions such as shade, cover and adjacent food sources can be retained.

d. If avoidance of woodrat nests is not possible, a qualified biologist shall develop and implement a Woodrat Relocation Plan to be implemented prior to the commencement of construction. The plan shall be developed in consultation with CDFW and shall include the following:

i. Trapping efforts and relocation activities shall not take place during low night temperatures (below 40 degrees Fahrenheit), inclement or extreme weather conditions.

ii. If no San Francisco ducky-footed woodrats are captured at a given nest, it shall be dismantled by hand to ground level, and the woody debris spread to reduce rebuilding.

iii. For occupied nests, the existing woodrat nest shall be dismantled and the woody debris, including cached food and nesting material, carried to the nearest suitable relocation site outside the project footprint and used to build an artificial shelter.

iv. Sites for artificial shelters shall be located as near as possible to the original nest location and no closer than 20 feet from existing woodrat nests and other artificial shelters. Choose the best available microhabitat, ideally in a location with sun and shade and if possible under the same species of tree or shrub as was present at the original nest location. Relocation sites shall contain biologically-suitable habitat features (e.g. stands of poison oak, coast live oaks, and dense native brush).

v. When releasing woodrats, the occupied live-trap shall be placed against the entrance to the artificial shelter, opened, and the woodrat allowed to enter, ideally on its own accord. After the individual enters, the entrance shall be loosely but completely plugged with dirt and leaf duff to encourage it to stay, at least for the short-term.

vi. If occupied nests were relocated, monitoring shall be conducted for 30 days after relocation is completed and include infrared and motion activated cameras, or other monitoring methods approved by CDFW, and an occupancy assessment. A report on San Francisco dusky-footed woodrat nest monitoring shall be provided to CDFW and County Environmental Planning within 30 days following the end of the monitoring period and shall include the methods and results of trapping and relocation, occupancy determinations, monitoring methods, and discussion of any remedies that may be needed.

BIO-10 To avoid/minimize impacts to nesting birds the following measures shall be adhered:

a. If removal of trees/vegetation, grading activity, or other use of heavy equipment begins outside of the February 1 to August 31 breeding season, there will be no need to conduct a preconstruction survey for active nests.

b. To the extent practical trees intended for removal shall be removed during the period of September 1st through January 31st to avoid the nesting season. If tree removal must occur outside the period of September 1st through January 31st a survey for active bird nests shall be conducted by a qualified biologist, as detailed below.

c. If removal of trees/vegetation, grading activity, or other use of heavy equipment is to commence between February 1st and August 31st, a survey for active bird nests shall

be conducted by a qualified biologist within two weeks prior to the start of such activity. The survey area shall include the project area, and a survey radius around the project area of 50 feet for MBTA birds and 250 feet for birds of prey.

d. If no active nest of a bird of prey or MBTA bird is found, then no further avoidance and minimization measures are necessary.

e. If active nest(s) of MBTA birds or birds of prey are found in the survey area, the following avoidance buffers shall be adhered to unless otherwise advised by CDFW or USFWS: Avoidance buffer of 50 feet for MBTA birds and 250 feet for birds of prey shall be established around the active nest(s). The biologist shall monitor the nest and advise the applicant when all young have fledged the nest. Removal of vegetation, grading activity, or other use of heavy equipment may begin after fledging is complete.

f. If the biologist determines that a smaller avoidance buffer will provide adequate protection for nesting birds, a proposal for alternative avoidance/protective measures, potentially including a smaller avoidance buffer and construction monitoring, may be submitted to USFWS and CDFW for review and approval prior to removal of vegetation, grading activity, or other use of heavy equipment.

g. If removal of vegetation, grading activity, or other use of heavy equipment stops for more than two weeks during the nesting season (February 1st - August 31st) a new survey shall be conducted prior to re-commencement of construction.

BIO-11 To avoid/minimize impacts to special-status bats the following measures shall be adhered to:

a. To the extent practical limbing/tree removal operations should occur between September 15 and November 1 to avoid bat maternity roosts and winter hibernacula. If tree limbing/tree removal operations must occur outside the period of September 15 through November 1 a survey for bats shall be conducted by a qualified biologist.

b. Prior to commencement of construction related activities including tree trimming and removal, a qualified biologist shall conduct a pre-construction survey for bats as follows:

i. The biologist shall determine if bats are utilizing the site for roosting. For any trees/snags/buildings that could provide roosting space for cavity or foliage-roosting bats, potential bat roost features shall be thoroughly evaluated to determine if bats are present. Visual inspection and/or acoustic surveys shall be utilized as initial techniques.

ii. If roosting bats are found, the biologist shall develop and implement acceptable passive exclusion methods in coordination with or based on CDFW recommendations. If feasible, exclusion shall take place during the appropriate windows (September 15 and November 1) to avoid harming bat maternity roosts and/or winter hibernacula. (Authorization from CDFW is required to evict winter hibernacula for bats).

iii. If established maternity colonies are found, in coordination with CDFW, a buffer shall be established around the colony to protect pre-volant young from construction disturbances until the young can fly; or implement other measures acceptable to CDFW.

iv. If a tree is determined not to be an active roost site for roosting bats, it may be immediately limbed or removed as follows: If foliage roosting bats are determined to be present, limbs shall be lowered, inspected for bats by a bat biologist, and chipped immediately or moved to a dump site.

v. Alternately, limbs may be lowered and left on the ground until the following day, when they can be chipped or moved to a dump site. No logs or tree sections shall be dropped on downed limbs or limb piles that have not been in place since the previous day.

BIO-12 Erosion and sediment control measures must be in place, and best management practices adhered to, during construction. All disturbed soils shall be stabilized to prevent siltation and reduce sediment and chemical-laden runoff into any drainages or water courses within the project vicinity.

BIO-13 All refueling, maintenance, and staging of equipment and vehicles shall occur at least 60 feet from aquatic or riparian habitat and not in a location from where a spill would drain directly toward aquatic habitat. A spill response plan shall be in place for such event.

BIO-14 Stationary equipment such as motors, generators, and welders located within 100 feet of Rodeo Gulch Creek and riparian habitat shall be positioned over drip pans and shall be stored overnight, when not in use, at a designated staging area greater than 60 feet from Rodeo Gulch Creek and associated riparian habitat.

BIO-15 Any hazardous or toxic materials deleterious to aquatic life that could be washed into adjacent sensitive habitats shall be contained in watertight containers.

Impact BIO-2: Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or the Service.

Construction of the project will result in temporary impacts to approximately 0.88 acres of arroyo willow riparian habitat, as described above arroyo willow riparian is considered a sensitive natural community. Potential impacts include tree trimming, vegetation removal and management, release of hazardous materials as a result of the pipeline bridge rehabilitation, and movement/operation of heavy equipment within riparian areas. The analyzed area of impact includes disturbance within the project site where staging, access, stockpiling, open cut trenching, scaffolding installation for pipeline bridge repair, and/or entry/exit pits for CIPP lining would occur. Upon completion of the pipeline, disturbed areas would be restored to pre-project contours and revegetated with native species. Therefore, the project would not result in permanent removal of riparian habitat, but the project would result in a temporary loss of vegetative cover and habitat for a period until newly planted vegetation have become established.

In accordance with Fish and Game Code Section 1602, SCCSD will acquire a Streambed Alteration Agreement from CDFW prior to construction. Additionally, in order to conduct work within a County-defined riparian corridor, the project must be granted a riparian exception by the County. Conditions of approval listed in the riparian exception must be adhered to. Prior to the approval of any riparian exception, a specific set of findings must be met. Preliminary review by County staff determined that the project meets these findings, and the conditions of approval for the riparian exception are incorporated into the measures to reduce impacts.

Implementation of BIO-1 through BIO-4, BIO-7, and BIO-12 through BIO-15, described above, are recommended to reduce or avoid potential impacts to sensitive habitats. In addition, BIO-16 is included below to restore any riparian habitat that is impacted during project construction and BIO-17 is included to reduce or avoid potential impacts to riparian habitat as a result of the pipeline bridge rehabilitation.

Construction of the project will result in temporary impacts to approximately 0.45 acres of coast live oak woodland, as described above coast live oak woodland is considered a sensitive natural community. As required by SCCC Section 16.32, SCCSD will obtain a biotic approval from the County for development within a sensitive habitat and will comply with all permit requirements.

BIO-16 To compensate for disturbance of sensitive habitats, and to comply with the Santa Cruz County General Plan Policy 5.1.12, the area of temporarily disturbed sensitive habitat shall be replaced in-kind at a minimum restoration to impact ratio of 1:1. A site-specific Habitat Restoration Plan shall be developed by a qualified biologist or restoration professional, and shall include the following minimum elements:

a. Identification of areas on site where temporary disturbance and re-establishment of native habitat shall occur. All areas temporarily disturbed as a result of the project shall be restored to pre-project contours to the maximum extent possible and re-vegetated with native plant species appropriate to the habitat disturbed.

b. A tree inventory assessment including the species, size, and locations of all trees intended for removal.

c. All native trees removed shall be replaced in-kind at a minimum 1:1 ratio. Non-native trees removed shall be replaced at a minimum 1:1 ratio by native tree species appropriate to the surrounding habitat.

d. A site-specific planting plan intended to inform the re-vegetation efforts. Local plant stock shall be used whenever possible. The plant pallet should include native species common to the surrounding native habitats that are being restored.

   i. Species, size, and locations of all restoration plantings (including replacement trees) shall be included in the planting plan.

   ii. Plantings of native shrubs and herbaceous vegetation shall occur at sizes and ratios determined by the restoration specialist to adequately restore native habitat while maximizing plant health and survivability of individual trees and shrubs.

iii. In areas designated for emergent wetland or seasonal wetland restoration, wetland plantings of native hydrophytic plant species and native erosion seed mix specific to wetlands shall be installed.

e. The enhancement objectives, type, and amount of revegetation to be implemented, and the specific methods to be employed for revegetation.

f. Information regarding the methods of irrigation for restoration plantings.

g. Plan for removal of non-native species and a management strategy to control re-establishment of invasive non-native species within the project impact area. This plan should include identification of areas adjacent to the project impact area where rehabilitation activities such as invasive plant removal may occur to reduce long-term recolonization of restored areas by invasive species.

h. A 5-year management plan for maintenance and monitoring of restored areas to maintain 100% survival of installed container stock in year 1, 90% survival in years 2-3, and at least 80% survival in years 4-5.

i. The management plan should include success criteria and monitoring requirements to ensure restoration meets the success criteria, including remedial measures to be implemented in the event that performance standards are not achieved.

ii. Replacement plants shall be installed as needed during the monitoring period to meet survival rates.

iii. Annual habitat monitoring reports shall be submitted to the County Planning Department by December 31 of each monitoring year.

i. The project proponent shall be responsible for execution of the 5-year management plan for maintenance and monitoring of restored areas. If responsibility is transferred legally to another entity, County Environmental Planning Staff shall be informed of any such transfer of responsibility.

j. Establishment and planting of all restoration area(s) as outlined in the final approved Restoration Planting Plan shall be inspected and approved by Environmental Planning staff prior to final project approval.

BIO-17 To prevent hazardous materials associated with the pipeline bridge rehabilitation component of the project from entering into riparian habitat or any other sensitive habitat a Containment Plan will be developed and implemented. The Containment Plan shall include but not be limited to:

a. Location and type of materials installed underneath the pipeline bridge to catch any/all hazardous materials during rehabilitation activities.

b. Entry and exit locations for all rehabilitation personnel.

c. Steps to contain and respond to a spill of hazardous materials.

d. Establishment of responsible personnel in the event hazardous materials enter the riparian corridor or other sensitive habitat.

e. The Containment Plan shall be approved by Environmental Planning staff prior to final project approval.

Impact BIO-3: 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.

The project is proposing to rehabilitate/replace the existing sewer trunkline with a new one in the same general vicinity as the existing line via a combination of trenchless and open trench construction methods. Temporary impacts will occur to the riparian corridor, but construction disturbance will not encroach below the OHWM of Rodeo Gulch Creek, with the exception of scaffolding installation and foot traffic associated with the pipeline bridge rehabilitation. Because no fill or dredging are proposed with the pipeline bridge rehabilitation no impacts are expected to occur to potential waters of the US/State.

Indirect impacts to jurisdictional waters could result from construction, if left unmanaged, such as soil erosion and water runoff. However, with implementation of construction and water quality BMPs as proposed, there would be no short-term or long-term indirect impacts to jurisdictional waters. The project would require a 1602 Streambed Alteration Agreement from CDFW, a Section 401 Water Quality Certification from the RWQCB, and a Riparian Exception from the County. Conditions of approval listed in all of these permits must be adhered to.

Implementation of the proposed project could have potentially significant direct, temporary impacts on wetlands and non-wetland waters under the jurisdiction of the RWQCB, and CDFW. Short-term and long-term indirect impacts to jurisdictional wetlands and waters relating to construction activities would not likely result in significant impacts. All activities would occur within existing recorded or prescriptive sewer easements and would be temporary. Potential impacts to jurisdictional wetlands and waters would be avoided or reduced through implementation of BIO-1 through BIO-4, BIO-7, and BIO-12 through BIO-15. Compensatory mitigation for impacts to jurisdictional wetlands would overlap with measures taken to address impacts to sensitive vegetation communities (as identified above in BIO-16).

Impact BIO-4: 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 nursery sites.

The project does not involve any activities that would interfere with the movements or migrations of fish or wildlife or impede use of a known wildlife nursery site. Rodeo Gulch Creek, between its' headwaters and Corcoran Lagoon, may serve as a local movement corridor that marginally connects habitat for certain amphibians, reptiles, and localized fish species, but is significantly constrained by Highway 1. Because the proposed alignment areas are already located within a fragmented habitat within a suburban setting, Rodeo Gulch Creek is not likely to function as a significant wildlife corridor or habitat linkage. Upon completion of installation of the new pipeline, the facility would be underground, and the pump station wet well would

be located in a paved/developed lot. Therefore, the proposed project is not expected to impede local or seasonal movement of wildlife through the surrounding habitat.

Impact BIO-5: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Approximately 0.85 acre of the project site is located within a County-defined riparian corridor as defined by the County's Riparian Corridor and Wetlands Protection Ordinance (SCCC Chapter 16.30). Arroyo willow riparian and coast live oak woodland habitat within the project site are considered sensitive habitats under the County's Sensitive Habitat Protection Ordinance (SCCC Chapter 16.32). See discussions and recommendations specified under Impact BIO-2 above. The project must be granted a Riparian Exception and Biotic Approval in order to be consistent with SCCC Sections 16.30 and 16.32. In order for a project to qualify for a Riparian Exception (SCCC Section 16.30.060), a specific set of findings must be made. Environmental Planning Staff will determine if the project meets these findings and issue a Riparian Exception and Conditioned Biotic Approval, The project will be subject to all conditions are included the Riparian Exception and Conditioned Biotic Approval. The project is therefore consistent with the County of Santa Cruz Riparian Corridor and Wetlands Protection and the Sensitive Habitat Protection Ordinances.

The project intends to remove seven trees, two of these trees meet the definition of "significant tree" in accordance with SCCC Section 16.34.030. Removal of "significant trees" requires a tree removal permit from the County. In accordance with County Code, SCCSD will obtain a tree removal permit from the County prior to tree removal. The Planning Director may attach reasonable conditions to mitigate visual impacts and ensure compliance with the Code, including but not limited to replacement of trees removed with trees acceptable to the Planning Director. The project will be subject to all conditions that are included the Tree Removal Permit The project is therefore consistent with the County of Santa Cruz Significant Tree Protection Ordinance.

Therefore, the project would not conflict with any local policies or ordinances protecting biological resources.

Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The project site does not lie within the boundaries of an adopted Habitat Conservation Plan or Natural Community Conservation Plan, or any other approved local, regional, or state habitat conservation plan. No impacts are anticipated.

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APPENDIX A

California Natural Diversity Database Report

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Felton (3712211) OR Laurel (3712118) OR Loma Prieta (3712117) OR Moss Landing (3612177) OR Santa Cruz (3612281) OR Soquel (3612188) OR Watsonville West (3612187))
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes OR Fungi)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Adela oplerella Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Agrostis blasdalei Blasdale's bent grass	PMPOA04060	None	None	G2G3	S2	1B.2
Ambystoma californiense pop. 1 California tiger salamander - central California DPS	AAAAA01181	Threatened	Threatened	G2G3T3	S3	WL
Ambystoma macrodactylum croceum Santa Cruz long-toed salamander	AAAAA01082	Endangered	Endangered	G5T1T2	S1S2	FP
Amsinckia lunaris bent-flowered fiddleneck	PDBOR01070	None	None	G3	S3	1B.2
Aneides niger Santa Cruz black salamander	AAAAD01070	None	None	G3	S3	SSC
Anniella pulchra Northern California legless lizard	ARACC01020	None	None	G3	S3	SSC
Anomobryum julaceum slender silver moss	NBMUS80010	None	None	G5?	S2	4.2
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Arctostaphylos andersonii Anderson's manzanita	PDERI04030	None	None	G2	S2	1B.2
Arctostaphylos hookeri ssp. hookeri Hooker's manzanita	PDERI040J1	None	None	G3T2	S2	1B.2
Arctostaphylos pajaroensis Pajaro manzanita	PDERI04100	None	None	G1	S1	1B.1
Arctostaphylos silvicola Bonny Doon manzanita	PDERI041F0	None	None	G1	S1	1B.2
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Asio flammeus short-eared owl	ABNSB13040	None	None	G5	S3	SSC
Astragalus agnicidus Humboldt County milk-vetch	PDFAB0F080	None	Endangered	G2	S2	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G2G3	S1S2	
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	Candidate Endangered	G2G3	S1	
Brachyramphus marmoratus marbled murrelet	ABNNN06010	Threatened	Endangered	G3	S2	
Calyptridium parryi var. hesseae Santa Cruz Mountains pussypaws	PDPOR09052	None	None	G3G4T2	S2	1B.1
Campanula californica swamp harebell	PDCAM02060	None	None	G3	S3	1B.2
Carex comosa bristly sedge	PMCYP032Y0	None	None	G5	S2	2B.1
Carex saliniformis deceiving sedge	PMCYP03BY0	None	None	G2	S2	1B.2
Ceanothus ferrisiae Coyote ceanothus	PDRHA041N0	Endangered	None	G1	S1	1B.1
Centromadia parryi ssp. congdonii Congdon's tarplant	PDAST4R0P1	None	None	G3T2	S2	1B.1
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
Chorizanthe pungens var. hartwegiana Ben Lomond spineflower	PDPGN040M1	Endangered	None	G2T1	S1	1B.1
Chorizanthe pungens var. pungens Monterey spineflower	PDPGN040M2	Threatened	None	G2T2	S2	1B.2
Chorizanthe robusta var. hartwegii Scotts Valley spineflower	PDPGN040Q1	Endangered	None	G2T1	S1	1B.1
Chorizanthe robusta var. robusta robust spineflower	PDPGN040Q2	Endangered	None	G2T1	S1	1B.1
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela ohlone Ohlone tiger beetle	IICOL026L0	Endangered	None	G1	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Clarkia concinna ssp. automixa Santa Clara red ribbons	PDONA050A1	None	None	G5?T3	S3	4.3
Coelus globosus globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
Collinsia multicolor San Francisco collinsia	PDSCR0H0B0	None	None	G2	S2	1B.2
Cordylanthus rigidus ssp. littoralis seaside bird's-beak	PDSCR0J0P2	None	Endangered	G5T2	S2	1B.1
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G4	S2	SSC
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Cypseloides niger black swift	ABNUA01010	None	None	G4	S2	SSC
Dacryophyllum falcifolium tear drop moss	NBMUS8Z010	None	None	G2	S2	1B.3
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T1T2	S2	
Dicamptodon ensatus California giant salamander	AAAAH01020	None	None	G2G3	S2S3	SSC
Dipodomys venustus venustus Santa Cruz kangaroo rat	AMAFD03042	None	None	G4T1	S1	
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eriogonum nudum var. decurrens Ben Lomond buckwheat	PDPGN08492	None	None	G5T1	S1	1B.1
Erysimum ammophilum sand-loving wallflower	PDBRA16010	None	None	G2	S2	1B.2
Erysimum teretifolium Santa Cruz wallflower	PDBRA160N0	Endangered	Endangered	G1	S1	1B.1
Eucyclogobius newberryi tidewater goby	AFCQN04010	Endangered	None	G3	S3	
Euphilotes enoptes smithi Smith's blue butterfly	IILEPG2026	Endangered	None	G5T1T2	S2	
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Fissidens pauperculus minute pocket moss	NBMUS2W0U0	None	None	G3?	S2	1B.2
Fissilicreagris imperialis Empire Cave pseudoscorpion	ILARAE5010	None	None	G1	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Gilia tenuiflora ssp. arenaria Monterey gilia	PDPLM041P2	Endangered	Threatened	G3G4T2	S2	1B.2
Hesperocyparis abramsiana var. abramsiana Santa Cruz cypress	PGCUP04081	Threatened	Endangered	G1T1	S1	1B.2
Hoita strobilina Loma Prieta hoita	PDFAB5Z030	None	None	G2?	S2?	1B.1
Holocarpha macradenia Santa Cruz tarplant	PDAST4X020	Threatened	Endangered	G1	S1	1B.1
Horkelia cuneata var. sericea Kellogg's horkelia	PDROS0W043	None	None	G4T1?	S1?	1B.1
Horkelia marinensis Point Reyes horkelia	PDROS0W0B0	None	None	G2	S2	1B.2
Lasiurus cinereus hoary bat	AMACC05030	None	None	G3G4	S4	
Lasthenia californica ssp. macrantha perennial goldfields	PDAST5L0C5	None	None	G3T2	S2	1B.2
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3T1	S1	FP
Lavinia exilicauda harengus Monterey hitch	AFCJB19013	None	None	G4T3	S3	SSC
Lessingia micradenia var. glabrata smooth lessingia	PDAST5S062	None	None	G2T2	S2	1B.2
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Lytta moesta moestan blister beetle	IICOL4C020	None	None	G2	S2	
Malacothamnus arcuatus arcuate bush-mallow	PDMAL0Q0E0	None	None	G2Q	S2	1B.2
Margaritifera falcata western pearlshell	IMBIV27020	None	None	G4G5	S1S2	
Meta dolloff Dolloff Cave spider	ILARA17010	None	None	G1	S3	
Microseris paludosa marsh microseris	PDAST6E0D0	None	None	G2	S2	1B.2
Monardella sinuata ssp. nigrescens northern curly-leaved monardella	PDLAM18162	None	None	G3T2	S2	1B.2
Monolopia gracilens woodland woollythreads	PDAST6G010	None	None	G3	S3	1B.2
Neochthonius imperialis Empire Cave pseudoscorpion	ILARAD1010	None	None	G1	S1	
Neotoma fuscipes annectens San Francisco dusky-footed woodrat	AMAFF08082	None	None	G5T2T3	S2S3	SSC

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Oncorhynchus kisutch pop. 4 coho salmon - central California coast ESU	AFCHA02034	Endangered	Endangered	G5T2Q	S2	
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S3	
Oncorhynchus mykiss irideus pop. 9 steelhead - south-central California coast DPS	AFCHA0209H	Threatened	None	G5T2Q	S2	
Pandion haliaetus osprey	ABNKC01010	None	None	G5	S4	WL
Pedicularis dudleyi Dudley's lousewort	PDSCR1K180	None	Rare	G2	S2	1B.2
Penstemon rattanii var. kleei Santa Cruz Mountains beardtongue	PDSCR1L5B1	None	None	G4T2	S2	1B.2
Pentachaeta bellidiflora white-rayed pentachaeta	PDAST6X030	Endangered	Endangered	G1	S1	1B.1
Philanthus nasalis Antioch specid wasp	IIHYM20010	None	None	G1	S2	
Piperia candida white-flowered rein orchid	PMORC1X050	None	None	G3?	S3	1B.2
Piperia yadonii Yadon's rein orchid	PMORC1X070	Endangered	None	G1	S1	1B.1
Plagiobothrys chorisianus var. chorisianus Choris' popcornflower	PDBOR0V061	None	None	G3T1Q	S1	1B.2
Plagiobothrys diffusus San Francisco popcornflower	PDBOR0V080	None	Endangered	G1Q	S1	1B.1
Polygonum hickmanii Scotts Valley polygonum	PDPGN0L310	Endangered	Endangered	G1	S1	1B.1
Polyphylla barbata Mount Hermon (=barbate) June beetle	IICOL68030	Endangered	None	G1	S2	
Rallus obsoletus obsoletus California Ridgway's rail	ABNME05011	Endangered	Endangered	G3T1	S1	FP
Rana boylii pop. 4 foothill yellow-legged frog - central coast DPS	AAABH01054	Proposed Threatened	Endangered	G3T2	S2	
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC
Reithrodontomys megalotis distichlis Salinas harvest mouse	AMAFF02032	None	None	G5T1	S1	
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Scaphinotus behrensi Behrens' snail-eating beetle	IICOL4L070	None	None	G2G4	S2S4	
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sidalcea malachroides maple-leaved checkerbloom	PDMAL110E0	None	None	G3	S3	4.2
Sorex ornatus salarius Monterey shrew	AMABA01105	None	None	G5T1T2	S1S2	SSC
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Stebbinsoseris decipiens Santa Cruz microseris	PDAST6E050	None	None	G2	S2	1B.2
Stygobromus imperialis Empire Cave amphipod	ICMAL05E30	None	None	G1	S1	
Stygobromus mackenziei Mackenzie's Cave amphipod	ICMAL05530	None	None	G1	S1	
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Thaleichthys pacificus eulachon	AFCHB04010	Threatened	None	G5	S1	
Trifolium buckwestiorum Santa Cruz clover	PDFAB402W0	None	None	G2	S2	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Trifolium polyodon Pacific Grove clover	PDFAB402H0	None	Rare	G1	S1	1B.1
Trimerotropis infantilis Zayante band-winged grasshopper	IIORT36030	Endangered	None	G1	S1	
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	

Record Count: 114

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APPENDIX B

Information for Planning and Consulting Resource List

IPaC **U.S. Fish & Wildlife Service**

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

Santa Cruz County, California

Local office

Ventura Fish And Wildlife Office

(805) 644-1766
(805) 644-3958
FW8VenturaSection7@FWS.Gov

2493 Portola Road, Suite B
Ventura, CA 93003-7726

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 species[1] 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 Fisheries[2]).

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.

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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:

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered
California Least Tern Sterna antillarum browni Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8104	Endangered
Least Bell's Vireo Vireo bellii pusillus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Marbled Murrelet Brachyramphus marmoratus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4467	Threatened
Southwestern Willow Flycatcher Empidonax traillii extimus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered
Western Snowy Plover Charadrius nivosus nivosus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened

Yellow-billed Cuckoo Coccyzus americanus — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/3911

Reptiles

NAME	STATUS

San Francisco Garter Snake Thamnophis sirtalis tetrataenia — Endangered

Wherever found

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/5956

Amphibians

NAME	STATUS

California Red-legged Frog Rana draytonii — Threatened

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2891

California Tiger Salamander Ambystoma californiense — Threatened

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2076

Foothill Yellow-legged Frog Rana boylii — Proposed Threatened

No critical habitat has been designated for this species.

Fishes

NAME	STATUS

Tidewater Goby Eucyclogobius newberryi — Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/57

Insects

NAME	STATUS

Monarch Butterfly Danaus plexippus — Candidate
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9743

Mount Hermon June Beetle Polyphylla barbata — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3982

Ohlone Tiger Beetle Cicindela ohlone — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8271

Zayante Band-winged Grasshopper Trimerotropis infantilis — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/1036

Flowering Plants

NAME	STATUS

Ben Lomond Spineflower Chorizanthe pungens var. hartwegiana — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7498

Ben Lomond Wallflower Erysimum teretifolium — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7429

Marsh Sandwort Arenaria paludicola — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/2229

Santa Cruz Tarplant Holocarpha macradenia — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/6832

Scotts Valley Polygonum Polygonum hickmanii — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/3222

Scotts Valley Spineflower Chorizanthe robusta var. hartwegii — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/7108

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.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species

- 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

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, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus 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.	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi 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/8	Breeds Apr 1 to Aug 15

Black Oystercatcher Haematopus bachmani — Breeds Apr 15 to Oct 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9591

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Black Swift Cypseloides niger — Breeds Jun 15 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8878

Black Tern Chlidonias niger — Breeds May 15 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3093

Black Turnstone Arenaria melanocephala — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
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/2084

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

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

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit Limosa fedoa — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20

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/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 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 and understand the FAQ "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.

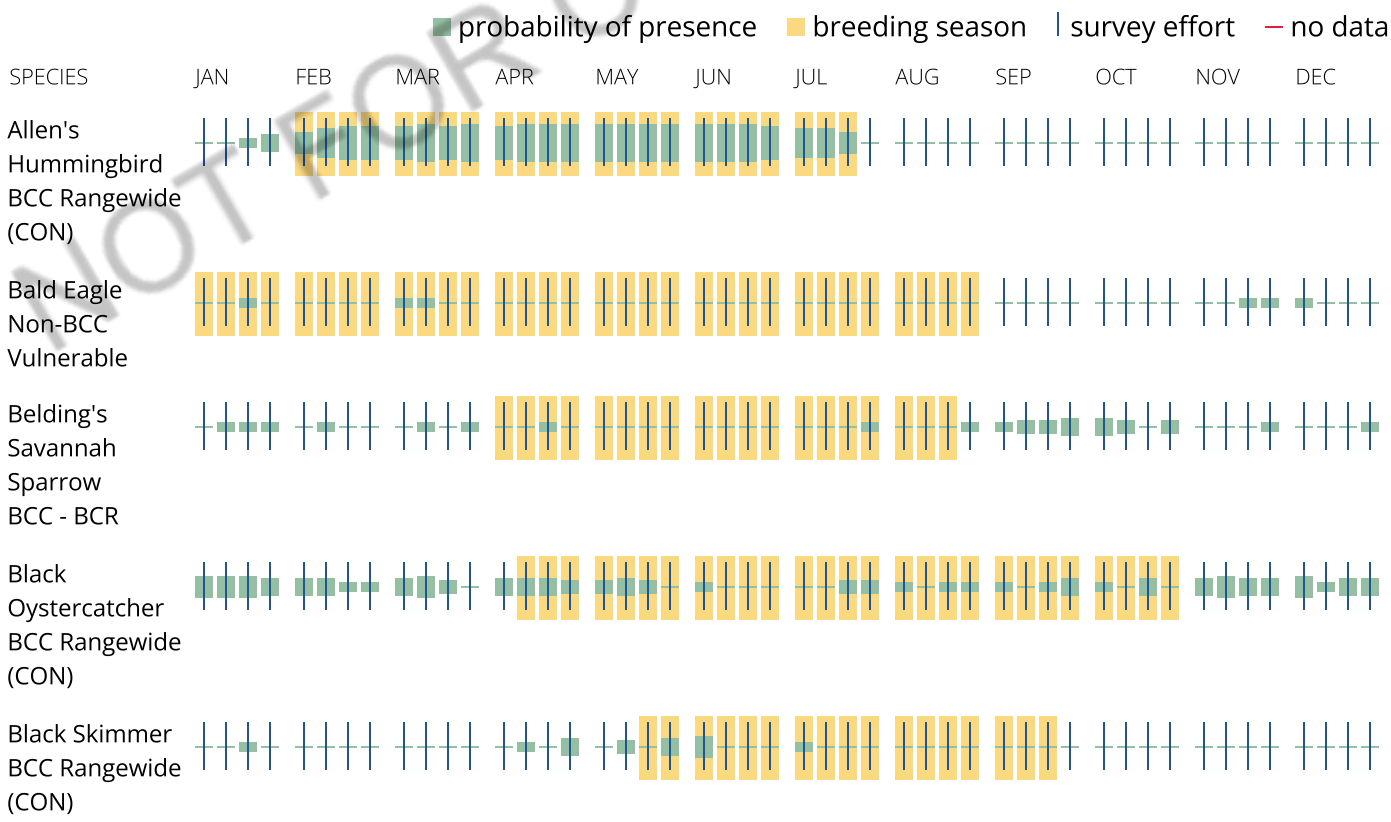
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

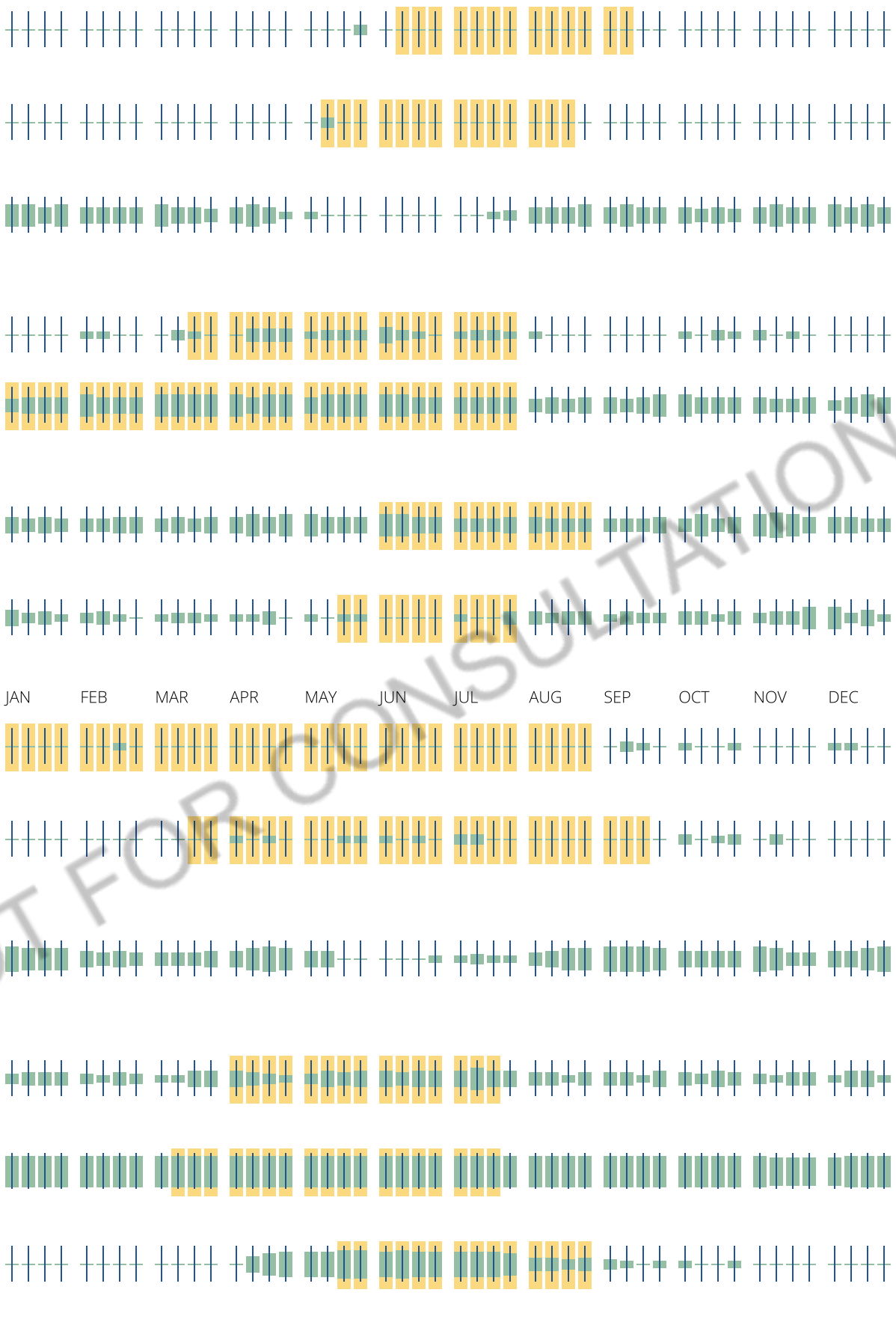
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

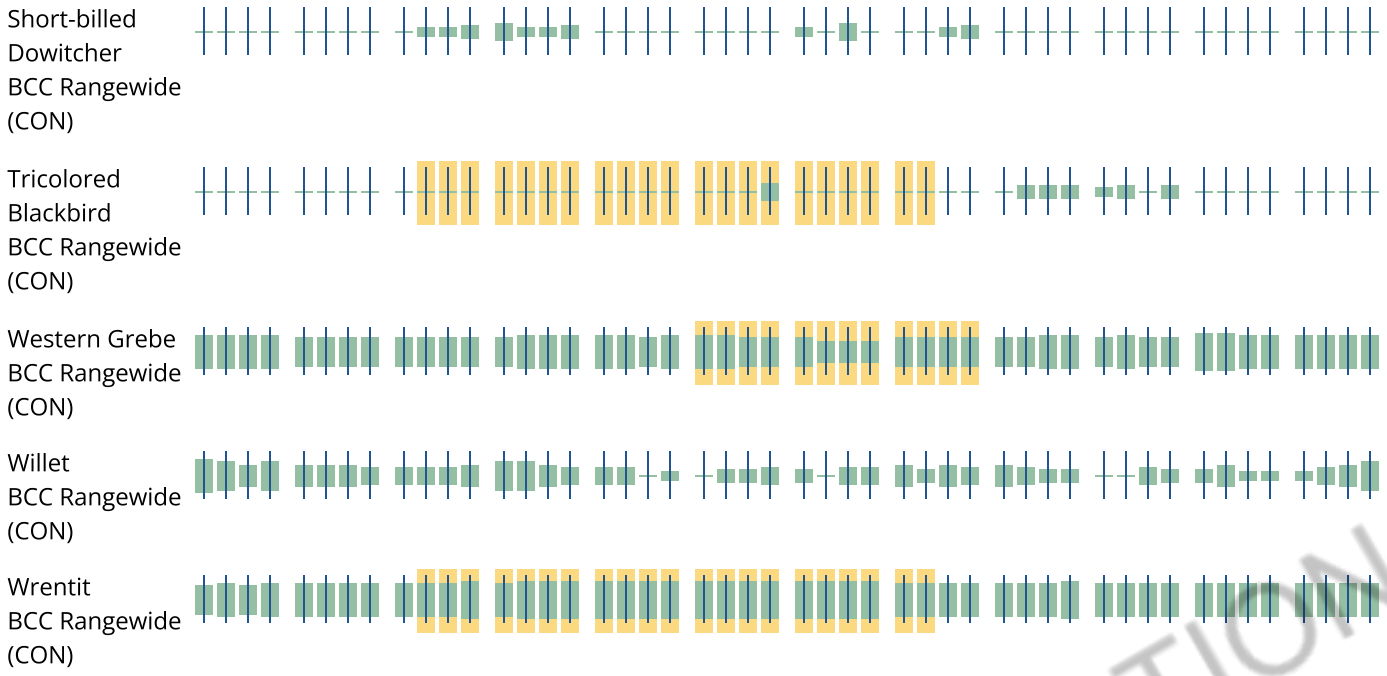
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

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.

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the official CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

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.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

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 tuberficid 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.

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APPENDIX C

Special-Status Species Table

SPECIAL-STATUS SPECIES TABLE

Soquel, Felton, Laurel, Loma Prieta, Moss Landing, Santa Cruz, and Watsonville West Quadrangles

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
MAMMALS			
Antrozous pallidus Pallid bat	— / SSC / —	Occurs in a wide variety of habitats including grasslands, shrublands, arid desert areas, oak savanna, coastal forested areas, and coniferous forests of the mountain regions of California. Most common in open, dry habitats with rocky areas for roosting. Day roosts include caves, crevices, mines, and occasionally hollow trees and buildings. Seems to prefer rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Similar structures are used for night roosting and will also use more open sites such as eaves, awnings, and open areas under bridges for feeding roosts.	**Moderate** Suitable roosting habitat is present within the project site. The CNDDB reports two non-specific occurrences of this species within the quadrangles reviewed. One occurrence is a historical (1928) occurrence which overlaps the project site. The other occurrence, reported in 2003, is 4.8 miles from the project site.
Corynorhinus townsendii Townsend's big-eared bat	— / SSC / —	Found primarily in rural settings from inland deserts to coastal redwoods, oak woodland of the inner Coast Ranges and Sierra foothills, and low to mid-elevation mixed coniferous-deciduous forests. Typically roost during the day in limestone caves, lava tubes, and mines, but can roost in buildings that offer suitable conditions. Night roosts are in more open settings and include bridges, rock crevices, and trees.	**Moderate** Suitable foraging and night roosting habitat are present within the project site; however, suitable maternity roosting habitat is not present. The CNDDB reports two historical (1945), non-specific occurrences of this species within the quadrangles reviewed, one overlapping the project site.
Neotoma macrotis annectens San Francisco dusky-footed woodrat	— / SSC / —	Forest habitats of moderate canopy with moderate to dense understory. Also occurs in chaparral habitats.	**High** Suitable habitat is present within the project site. The CNDDB reports one occurrence of this species within the quadrangles reviewed, located 3.9 miles from the project site. This species is known to occur throughout the San Francisco Bay region.
Sorex ornatus salarius Monterey shrew	— / SSC / —	Mostly moist or riparian woodland habitats, and within chaparral, grassland, and emergent wetland habitats where there is a thick duff or downed logs.	**Low** Suitable habitat is present within the project site; however, the CNDDB reports only one occurrence of this species within the quadrangles reviewed, located 15 miles from the project site.
Taxidea taxus American badger	— / SSC / —	Dry, open grasslands, fields, pastures savannas, and mountain meadows near timberline are preferred. The principal requirements seem to be sufficient food, friable soils, and relatively open, uncultivated grounds.	**Low** Marginal, low quality habitat is present within the project site. The CNDDB reports three occurrences of this species within the quadrangles reviewed, the nearest located 4.5 miles from the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
BIRDS			
Agelaius tricolor Tricolored blackbird (nesting colony)	— / ST / —	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes, and ponds. Forages over grassland or aquatic habitats.	**Unlikely** No suitable habitat within the project site.
Aquila chrysaetos Golden eagle (nesting & wintering)	— / CFP / —	Use rolling foot-hills, mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, cliffs, and rocky outcrops. Nest in secluded cliffs with overhanging ledges as well as large trees.	**Unlikely** No suitable habitat within the project site.
Asio flammeus Short-eared owl (nesting)	— / SSC / —	Usually found in open areas with few trees, such as annual and perennial grasslands, prairies, meadows, dunes, irrigated lands, and saline and freshwater emergent marshes. Dense vegetation is required for roosting and nesting cover. This includes tall grasses, brush, ditches, and wetlands. Open, treeless areas containing elevated sites for perching, such as fence posts or small mounds, are also needed. Some individuals breed in northern California.	**Unlikely** No suitable habitat is present within the project site.
Athene cunicularia Burrowing owl (burrow sites & some wintering sites)	— / SSC / —	Year round resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of pinyon-juniper and ponderosa pine habitats. Frequent open grasslands and shrublands with perches and burrows. Use rodent burrows (often California ground squirrel) for roosting and nesting cover. Pipes, culverts, and nest boxes may be substituted for burrows in areas where burrows are not available.	**Low** Marginal, low quality habitat is present within the project site. The CNDDB reports five occurrences of this species within the quadrangles reviewed, the nearest located 4.2 miles from the project site.
Brachyramphus marmoratus Marbled Murrelet	FT / SE / —	Occur year-round in marine subtidal and pelagic habitats from the Oregon border to Point Sal. Partial to coastlines with stands of mature redwood and Douglas-fir. Requires dense mature forests of redwood and/or Douglas-fir for breeding and nesting.	**Unlikely** No suitable habitat within the project site.
Charadrius alexandrinus nivosus Western snowy plover (nesting)	FT / SSC / —	Sandy beaches on marine and estuarine shores, also salt pond levees and the shores of large alkali lakes. Requires sandy, gravelly or friable soil substrate for nesting.	**Unlikely** No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Coturnicops noveboracensis Yellow rail	— / SSC / —	Wet meadows and coastal tidal marshes. Occurs year round in California, but in two primary seasonal roles: as a very local breeder in the northeastern interior and as a winter visitor (early Oct to mid-Apr) on the coast and in the Suisun Marsh region	**Unlikely** No suitable habitat within the project site.
Cypseloides niger Black swift (nesting)	— / SSC / —	Regularly nests in moist crevice or cave on sea cliffs above the surf, or on cliffs behind, or adjacent to, waterfalls in deep canyons. Forages widely over many habitats.	**Unlikely** No suitable habitat within the project site.
Elanus leucurus White-tailed kite (nesting)	— / CFP / —	Open groves, river valleys, marshes, and grasslands. Prefer such area with low roosts (fences etc.). Nest in shrubs and trees adjacent to grasslands.	**Low** Marginal, low quality habitat is present within the project site. The CNDDB reports one occurrence of this species within the quadrangles reviewed, located 5.2 miles from the project site.
Empidonax trailii extimus Southwestern willow flycatcher	FE / SE / —	Breeds in riparian habitat in areas ranging in elevation from sea level to over 2,600 meters. Builds nest in trees in densely vegetated areas. This species establishes nesting territories and builds, and forages in mosaics of relatively dense and expansive areas of trees and shrubs, near or adjacent to surface water or underlain by saturated soils. Not typically found nesting in areas without willows (*Salix sp*.), tamarisk (*Tamarix ramosissima)*, or both.	**Unlikely** Suitable habitat is present within the project site; however, the CNDDB does not report any occurrences of this species within the quadrangles reviewed, and the project site is likely outside the current range of this species.
Falco peregrinus anatum American peregrine falcon (nesting)	— / CFP / —	Forages for other birds over a variety of habitats. Breeds primarily on rocky cliffs.	**Unlikely** No suitable nesting habitat is present within the project site.
Laterallus jamaicensis coturniculus California black rail	— / ST+CFP / —	Inhabits freshwater marshes, wet meadows & shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that does not fluctuate during the year & dense vegetation for nesting habitat.	**Unlikely** No suitable habitat within the project site.
Rallus obsoletus obsoletus California Ridgeway's rail	FE / SE+CFP / —	Salt and brackish marshes.	**Unlikely** No suitable habitat is present within the project site.
Riparia riparia Bank swallow (nesting)	— / ST / —	Nest colonially in sand banks. Found near water; fields, marshes, streams, and lakes.	**Unlikely** No suitable habitat is present within the project site.
Sterna antillarum browni California least tern	FE / SE / —	Prefers undisturbed nest sites on open, sandy/gravelly shores near shallow-water feeding areas in estuaries. Sea beaches, bays, large rivers, bars.	**Unlikely** No suitable habitat within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Vireo bellii pusillus Least Bell's vireo	FE / SE / —	Riparian areas and drainages. Breed in willow riparian forest supporting a dense, shrubby understory. Oak woodland with a willow riparian understory is also used in some areas, and individuals sometimes enter adjacent chaparral, coastal sage scrub, or desert scrub habitats to forage.	**Unlikely** Suitable habitat is present within the project site; however, the CNDDB does not report any occurrences of this species within the quadrangles reviewed, and the project site is likely outside the current range of this species.
REPTILES AND AMPHIBIANS			
Ambystoma californiense California tiger salamander	FT / ST / —	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Need underground refuges and vernal pools or other seasonal water sources.	**Unlikely** No suitable breeding habitat is present within the project site. Suitable upland habitat is present; however, the project site is beyond the dispersal range of any known breeding resources.
Ambystoma macrodactylum croceum Santa Cruz long-toed salamander	FE / SE+CFP / —	Preferred habitats include ponderosa pine, montane hardwood-conifer, mixed conifer, montane riparian, red fir and wet meadows. Occurs in a small number of localities in Santa Cruz and Monterey Counties. Adults spend the majority of the time in underground burrows and beneath objects. Larvae prefer shallow water with clumps of vegetation.	**Unlikely** No suitable breeding habitat is present within the project site. Suitable upland habitat is present; however, the project site is beyond the dispersal range of any known breeding resources.
Aneides niger Santa Cruz black salamander	— / SSC / —	Occurs in the fog belt of the outer Coastal Range in mesic forests. This species occurs in moist streamside microhabitats. This species is often found in shallow standing water or seeps. Small geographical range consisting of woodland habitat within the Santa Cruz Mountains in western Santa Clara, northern Santa Cruz, and southernmost San Mateo Counties.	**Moderate** Suitable habitat is present within the project site only in scattered islands of riparian vegetation. The CNDDB reports 30 occurrences of this species within the quadrangles reviewed, several located within five miles of the project site. However, no occurrences of this species have been reported within the Rodeo Gulch riparian corridor, which is surrounded by urban development, including major roads and highways. As a result, the project site is isolated from any occurrences and most other habitat for this species.
Anniella pulchra Northern California legless lizard	— / SSC / —	Requires moist, warm habitats with loose soil for burrowing and prostrate plant cover, often forages in leaf litter at plant bases; may be found on beaches, sandy washes, and in woodland, chaparral, and riparian areas.	**Low** Suitable habitat is present within the project site; however, only marginally suitable soil conditions are present. The CNDDB reports 12 occurrences of this species within the quadrangles reviewed, the nearest located 9.8 miles from the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Dicamptodon ensatus California giant salamander	— / SSC / —	Occurs within the Coast Range from just north of the southern border of Mendocino County to southern Santa Cruz County. Found in wet coastal forests in or around clear, cold permanent and semi-permanent streams and seepages. Typically within elevations ranging from sea level to approximately 3000 feet.	**Low** Suitable habitat is present within the project site. The CNDD reports 34 occurrences of this species within the quadrangles reviewed, the nearest located 1.1 miles of the project site. However, no occurrences of this species have been reported within the Rodeo Gulch riparian corridor, which is surrounded by urban development, including major roads and highways. As a result, the project site is isolated from any occurrences and most other habitat for this species.
Emys marmorata Western pond turtle	— / SSC / —	Associated with permanent or nearly permanent water in a wide variety of habitats including streams, lakes, ponds, irrigation ditches, etc. Require basking sites such as partially submerged logs, rocks, mats of vegetation, or open banks.	**Low** Suitable habitat is present within the project site. The CNDD reports 17 occurrences of this species within the quadrangles reviewed, the nearest located less than one mile from the project site at Soquel Creek. However, no occurrences of this species have been reported within the Rodeo Gulch riparian corridor, which is surrounded by urban development, including major roads and highways. As a result, the project site is isolated from any occurrences and most other habitat for this species.
Rana boylii Foothill yellow-legged frog	— / SE / —	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats, including hardwood, pine, and riparian forests, scrub, chaparral, and wet meadows. Rarely encountered far from permanent water.	**Low** Suitable breeding habitat may be present adjacent to the project site within Rodeo Gulch Stream. Suitable upland habitat is present within the project site in scattered pockets of riparian and oak woodland vegetation. The CNDD reports 17 occurrences of this species within the quadrangles reviewed, the nearest located less than one mile from the project site at Soquel Creek. However, no occurrences of this species have been reported within the Rodeo Gulch riparian corridor, which is surrounded by urban development, including major roads and highways. As a result, the project site is isolated from any occurrences and most other habitat for this species.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Rana draytonii California red-legged frog	FT / SSC / —	Lowlands and foothills in or near permanent or late-season sources of deep water with dense, shrubby, or emergent riparian vegetation. During late summer or fall adults are known to utilize a variety of upland habitats with leaf litter or mammal burrows.	**Low** Suitable breeding habitat may be present adjacent to the project site within Rodeo Gulch Stream. Suitable upland habitat is present within the project site in scattered pockets of riparian and oak woodland vegetation. The CNDD reports 44 occurrences of this species within the quadrangles reviewed; however, the nearest occurrence is reported approximately 4.7 miles west of the project site, beyond the dispersal range of this species. In addition, the project site is surrounded by urban development, including major roads and highways, in all directions. As a result, the project site is isolated from most other habitat for CRLF except through the Rodeo Gulch riparian corridor, where no occurrences of this species have been reported.
Thamnophis sirtalis tetrataenia San Francisco garter snake	FE / SE+CFP / —	An extremely scarce subspecies which only occurs in the vicinity of ponds and reservoirs in San Mateo county.	**Unlikely** No suitable habitat within project site. The project site is likely outside the current range of this species.
FISH			
Eucyclogobius newberryi Tidewater goby	FE / SSC / —	Brackish water habitats, found in shallow lagoons and lower stream reaches. Tidewater gobies appear to be naturally absent (now and historically) from three large stretches of coastline where lagoons or estuaries are absent and steep topography or swift currents may prevent tidewater gobies from dispersing between adjacent localities. The southernmost large, natural gap occurs between the Salinas River in Monterey County and Arroyo del Oso in San Luis Obispo County.	**Potential Adjacent** Suitable habitat is present within the lower reaches of Rodeo Gulch stream adjacent to the project site. The CNDDB reports sixteen occurrences of this species within the quadrangles reviewed, including a 1996 occurrence directly adjacent to the project site near the mouth of the Rodeo Gulch stream. Tidewater goby has the potential to occur adjacent to but not within the project site.
Lavinia exilicauda harengus Monterey hitch	— / SSC / —	Found only within the Pajaro and Salinas River systems. Can occupy a wide variety of habitats, however, they are most abundant in lowland areas with large pools or small reservoirs that mimic such conditions. May be found in brackish water conditions within the Salinas River lagoon during the early summer months when the sandbar forms at the mouth of the river.	**Unlikely** The project site is outside the known distribution range of this species.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Oncorhynchus kisutch Coho salmon (central California coast ESU)	FE / SE / —	All naturally spawned populations from Punta Gorda south to and including the San Lorenzo River; populations in tributaries to San Francisco Bay, excluding the Sacramento–San Joaquin River system; and four artificial propagation programs.	**Unlikely** Suitable habitat is present within the project site; however, this species is not known to occur within Rodeo Gulch Stream.
Oncorhynchus mykiss irideus Steelhead (central California coast DPS)	FT / — / —	Coastal perennial and near perennial streams, with suitable spawning and rearing habitat and no major barriers.	**Unlikely** Suitable habitat is present within the project site; however, this species is not known to occur within Rodeo Gulch Stream.
Oncorhynchus mykiss irideus Steelhead (south-central California coast DPS)	FT / — / —	Cold headwaters, creeks, and small to large rivers and lakes; anadromous in coastal streams.	**Unlikely** Suitable habitat is present within the project site; however, this species is not known to occur within Rodeo Gulch Stream.
Spirinchus thaleichthys Longfin smelt	FC / ST / —	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefers salinities of 15-30 PPT, but can be found in completely freshwater to almost pure seawater.	**Unlikely** No suitable habitat is present within the project site.
Thaleichthys pacificus Eulachon	FT / — / —	Small, anadromous fish from the eastern Pacific Ocean, commonly called smelt, candlefish, or hooligan. Typically spend 3 to 5 years in saltwater before returning to freshwater to spawn from late-winter through mid-spring. Occur in nearshore ocean waters and to 1,000 feet (300 m) in depth, except for the brief spawning runs into their natal (birth) streams. Spawning grounds are typically in the lower reaches of larger snowmelt-fed rivers with water temperatures ranging from 39 to 50°F. Spawning occurs over sand or coarse gravel substrates.	**Unlikely** No suitable habitat is present within the project site.
INVERTEBRATES			
Cicindela ohlone Ohlone tiger beetle	FE / — / —	Coastal terraces with remnant stands of open native grassland with clay or sandy soils. Hunt, breed, and dig small vertical burrows along sunny single-track trails and dirt roads (maintained by cattle, hikers, etc.) in coast terrace meadows that still support native grasses. Current range from the City of Scotts Valley to the eastern edge of the City of Santa Cruz.	**Unlikely** No suitable habitat is present within the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Danaus plexippus Monarch butterfly	FC / — / —	Overwinters in coastal California using colonial roosts generally found in Eucalyptus, pine and acacia trees. Overwintering habitat for this species within the Coastal Zone represents ESHA. Local ordinances often protect this species as well.	**Unlikely** No suitable habitat within the project site. This species is not known to use the site for overwintering habitat.
Euphilotes enoptes smithi Smith's blue butterfly	FE / — / —	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz Counties. Plant hosts are *Eriogonum latifolium* and *E. parvifolium*.	**Not Present** No suitable habitat is present within the project site. The plant host species were not identified during the 2020 biological survey.
Polyphylla barbata Mount Hermon (=barbate) June beetle	FE / — / —	Ponderosa pine-chaparral habitat with sandy soil and open, sparsely vegetated areas. May also occur in more vegetated areas of chaparral. While not always present, silver-leaved manzanita is often an indicator of suitable habitat. Restricted to the Zayante sandhills habitat of the Ben Lomond-Mount Harmon-Scotts Valley area.	**Not Present** No suitable habitat is present within the project site. The project site is outside of the currently known range for this species.
Trimerotropis infantilis Zayante band-winged grasshopper	FE / — / —	Open sandy areas with sparse, low annual and perennial herbs on high ridges with sparse ponderosa pine. Often occurs with Ben Lomond wallflower. Restricted to sand parkland habitat found on ridges and hills within the Zayante sandhills habitat in Santa Cruz County. Flight season extends from late May through August.	**Not Present** No suitable habitat is present within the project site. The project site is outside of the currently known range for this species.
PLANTS			
Agrostis blasdalei Blasdale's bent grass	— / — / 1B	Coastal bluff scrub, coastal dunes, and coastal prairie at elevations from 0-150 meters. Perennial rhizomatous herb in the Poaceae family. Blooms May – July.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Amsinckia lunaris Bent-flowered fiddleneck	— / — / 1B	Coastal bluff scrub, cismontane woodland, and valley and foothill grassland at elevations of 3-500 meters. Annual herb in the Boraginaceae family; blooms March-June.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Arctostaphylos andersonii Anderson's manzanita	— / — / 1B	Openings and edges of broadleaved upland forest, chaparral, and north coast coniferous forest at elevations of 60-760 meters. Evergreen shrub in the Ericaceae family; blooms November-May.	**Not Present** Suitable habitat is present within the project site; however, the site is outside the known elevation range of this species, and this species was not identified during 2020 and 2021 biological surveys
Arctostaphylos hookeri ssp. *hookeri* Hooker's manzanita	— / — / 1B	Closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub on sandy soils at elevations of 85-536 meters. Evergreen shrub in the Ericaceae family; blooms January-June.	**Not Present** Suitable habitat is present within the project site; however, the site is outside the known elevation range of this species, and this species was not identified during 2020 and 2021 biological surveys.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Arctostaphylos pajaroensis Pajaro manzanita	— / — / 1B	Chaparral on sandy soils at elevations of 30-760 meters. Evergreen shrub in the Ericaceae family; blooms December-March.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Arctostaphylos silvicola Bonny Doon manzanita	— / — / 1B	Chaparral, closed-cone coniferous forest, and lower montane coniferous forest on inland marine sands at elevations of 120-600 meters. Evergreen shrub in the Ericaceae family; blooms February-March.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not identified during 2020 and 2021 biological surveys.
Arenaria paludicola Marsh sandwort	FE / SE / 1B	Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake. Sandy openings of freshwater of brackish marshes and swamps at elevations of 3-170 meters. Stoloniferous perennial herb in the Caryophyllaceae family; blooms May-August.	**Not Present** No suitable habitat within the project site. The project site is outside of the currently known range of this species and this species was not identified during 2020 and 2021 biological surveys.
Calyptridium parryi var. hesseae Santa Cruz Mountains pussypaws	— / — / 1B	Sandy or gravelly openings of chaparral and cismontane woodlands at elevations of 305-1530 meters. Annual herb in the Montiaceae family; blooms May-August.	**Not Present** Suitable habitat is present within the project site; however, the site is outside the known elevation range of this species. Not identified during 2020 and 2021 biological surveys.
Campanula californica Swamp harebell	— / — / 1B	Mesic areas of bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, freshwater marshes and swamps, and North Coast coniferous forest at elevations of 1-405 meters. Perennial rhizomatous herb in the Campanulaceae family; blooms June-October.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Carex comosa Bristly sedge	— / — / 2B	Coastal prairie, marshes and swamps on lake margins, and valley and foothill grassland at elevations of 0-625 meters. Perennial rhizomatous herb in the Cyperaceae family; blooms May-September.	**Not Present** Marginally suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Carex saliniformis Deceiving sedge	— / — / 1B	Mesic areas of coastal prairie, coastal scrub, meadows and seeps, and coastal salt marshes and swamps at elevations of 3-230 meters. Perennial rhizomatous herb in the Cyperaceae family; blooms June-July.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Ceanothus ferrisiae *Coyote ceanothus*	FE / — / 1B	Chaparral, coastal scrub, and valley and foothill grassland on serpentinite soils, at elevations of 120-460 meters. Perennial evergreen shrub in the Rhamnaceae family; blooms January-May.	**Not Present** Marginally suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Centromadia parryi ssp. *congdonii* Congdon's tarplant	— / — / 1B	Valley and foothill grassland on heavy clay, saline, or alkaline soils at elevations of 0-230 meters. Annual herb in the Asteraceae family; blooms May-November.	**Not Present** Marginally suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Chorizanthe pungens var. *hartwegiana* Ben Lomond spineflower	FE / — / 1B	Lower montane coniferous forest (maritime ponderosa pine sandhills) at elevations of 90-610 meters. Annual herb in the Polygonaceae family; blooms April-July.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not identified during 2020 and 2021 biological surveys.
Chorizanthe pungens var. *pungens* Monterey spineflower	FT / — / 1B	Maritime chaparral, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland on sandy soils at elevations of 3-450 meters. Annual herb in the Polygonaceae family; blooms April-July.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Chorizanthe robusta var. *hartwegii* Scott's Valley spineflower	FE / — / 1B	Meadows and seeps on sandy soils and valley and foothill grassland on mudstone and Purisima outcrops at elevations of 230-245 meters. Annual herb in the Polygonaceae family; blooms April-July.	**Not Present** Marginally suitable habitat is present within the project site; however, the site is outside the known elevation range of this species and this species was not identified during 2020 and 2021 biological surveys.
Chorizanthe robusta var. *robusta* Robust spineflower	FE / — / 1B	Openings in cismontane woodland, coastal dunes, maritime chaparral, and coastal scrub on sandy or gravelly soils at elevations of 3-300 meters. Annual herb in the Polygonaceae family; blooms April-September.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Collinsia multicolor San Francisco collinsia	— / — / 1B	Closed-cone coniferous forest and coastal scrub, sometimes on serpentinite soils, at elevations of 30-250 meters. Annual herb in the Plantaginaceae family; blooms March-May.	**Unlikely** No suitable habitat within the project site.
Cordylanthus rigidus ssp. *littoralis* Seaside bird's-beak	— / SE / 1B	Closed-cone coniferous forests, maritime chaparral, cismontane woodlands, coastal dunes, and coastal scrub on sandy soils, often on disturbed sites, at elevations of 0-425 meters. Annual hemi-parasitic herb in the Orobanchaceae family; blooms April-October.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Dacryophyllum falcifolium Tear drop moss	— / — / 1B	North coast coniferous forests on carbonate soils at elevations of 50-275 meters. Moss. Known only in Monterey and Santa Cruz counties.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Eriogonum nudum var. decurrens Ben Lomond buckwheat	— / — / 1B	Chaparral, cismontane woodland, and lower montane coniferous forest (maritime ponderosa pine sandhills) on sandy soils, at elevations of 50-800 meters. Perennial herb in the Polygonaceae family; blooms June-October.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Erysimum ammophilum Sand-loving wallflower	— / — / 1B	Openings in maritime chaparral, coastal dunes, and coastal scrub on sandy soils at elevations of 0-60 meters. Perennial herb in the Brassicaceae family; blooms February-June.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Erysimum teretifolium Santa Cruz wallflower	FE / SE / 1B	Chaparral and lower montane coniferous forest on inland marine sands, at elevations of 120-610 meters. Perennial herb in the Brassicaceae family; blooms March-July.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not identified during 2020 and 2021 biological surveys.
Fissidens pauperculus Minute pocket moss	— / — / 1B	North coast coniferous forest on damp coastal soil at elevations of 10-1024 meters. Moss in the Fissidentaceae family.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Gilia tenuiflora ssp. *arenaria* Monterey gilia	FE / ST / 1B	Openings in maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub on sandy soils at elevations of 0-45 meters. Annual herb in the Polemoniaceae family; blooms April-June.	**Unlikely** No suitable habitat within the project site.
Hesperocyparis abramsiana var. *abramsiana* Santa Cruz cypress	FE / SE / 1B	Closed-cone coniferous forest, chaparral, and lower montane coniferous forest on sandstone or granitic soils at elevations of 280-800 meters. Evergreen tree in the Cupressaceae family.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not identified during 2020 and 2021 biological surveys.
Hoita strobilina Loma Prieta hoita	— / — / 1B	Mesic areas of chaparral, cismontane woodland, and riparian woodland, usually on serpentinite soils, at elevations of 30-860 meters. Perennial herb in the Fabaceae family; blooms May-October.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Holocarpha macradenia Santa Cruz tarplant	FT / SE / 1B	Coastal prairies and valley foothill grasslands, often clay or sandy soils, at elevations of 10-220 meters. Annual herb in the Asteraceae family; blooms June-October.	**Not Present** Marginally suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Horkelia cuneata var. *sericea* Kellogg's horkelia	— / — / 1B	Openings of closed-cone coniferous forests, maritime chaparral, coastal dunes, and coastal scrub on sandy or gravelly soils at elevations of 10-200 meters. Perennial herb in the Rosaceae family; blooms April-September.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Horkelia marinensis Point Reyes horkelia	— / — / 1B	Coastal dunes, coastal prairie, and coastal scrub on sandy soils at elevations of 5-350 meters. Perennial herb in the Rosaceae family; blooms May-September.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Lasthenia californica spp. *macrantha* Perennial goldfields	— / — / 1B	Coastal bluff scrub, coastal dunes, and coastal scrub at an elevation of 5-520 meters. Perennial herb in the Asteraceae family. Blooms January – November.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Lessingia micradenia var. glabrata Smooth lessingia	— / — / 1B	Chaparral and cismontane woodlands on serpentinite soils, often on roadsides, at elevations of 120-420 meters. Annual herb in the Asteraceae family; blooms July-November.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not identified during 2020 and 2021 biological surveys.
Malacothamnus arcuatus Arcuate bush-mallow	— / — / 1B	Chaparral and cismontane woodland at elevations of 15-355 meters. Perennial evergreen shrub in the Malvaceae family; blooms April-September.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Microseris paludosa Marsh microseris	— / — /1B	Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland at elevations of 5-300 meters. Perennial herb in the Asteraceae family; blooms April-July.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Monardella sinuata ssp. *nigrescens* Northern curly-leaved monardella	— / — /1B	Chaparral, coastal dunes, coastal scrub, and lower montane coniferous forest (ponderosa pine sandhills) on sandy soils at elevations of 0-300 meters. Annual herb in the Lamiaceae family; blooms April-September.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Monolopia gracilens Woodland wollythreads	— / — / 1B	Openings of broadleaved upland forest, chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland on serpentinite soils at elevations of 100-1200 meters. Annual herb in the Asteraceae family; blooms February-July.	**Not Present** Suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species, and this species was not identified during 2020 and 2021 biological surveys.
Pedicularis dudleyi Dudley's lousewort	— / SR / 1B	Maritime chaparral, cismontane woodland, North Coast coniferous forest, and valley and foothill grassland at elevations of 60-900 meters. Perennial herb in the Orbanchaceae family; blooms April-June.	**Not Present** Suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species and this species was not identified during 2020 and 2021 biological surveys.
Penstemon rattanii var. *kleei* Santa Cruz Mountains beardtongue	— / — / 1B	Chaparral and lower montane and North Coast coniferous forests at elevations of 400-1100 meters. Perennial herb in the Plantaginaceae family; blooms May-June.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not identified during 2020 and 2021 biological surveys.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Pentachaeta bellidiflora White-rayed pentachaeta	FE / SE / 1B	Cismontane woodland and valley and foothill grasslands, often on serpentinite soils, at elevations of 35-620 meters. Annual herb in the Asteraceae family; blooms March-May.	**Low** Suitable habitat is present within the project site. The CNDDB reports a historical (1933), non-specific occurrence of this species which overlaps the site. The location of this occurrence is unknown but the habitat description of the collection says "beach cliffs." The CNDDB considers this occurrence possibly extirpated. The CNDDB reports only one other occurrence of this species within the quadrangles reviewed, which is more than 10 miles from the project site and is also considered possibly extirpated.
Piperia candida White-flowered rein orchid	— / — / 1B	Broadleaved upland forest, lower montane coniferous forest, and North Coast coniferous forest, sometimes on serpentinite soils, at elevations of 30-1310 meters. Perennial herb in the Orchidaceae family; blooms May-September.	**Not Present** Suitable habitat is present within the project site; however, this species was not identified during 2020 and 2021 biological surveys.
Piperia yadonii Yadon's rein orchid	FE / — / 1B	Sandy soils in coastal bluff scrub, closed-cone coniferous forest, and maritime chaparral at elevations of 10-510 meters. Annual herb in the Orchidaceae family; blooms February-August.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Plagiobothrys chorisianus var. *chorisianus* Choris' popcorn-flower	— / — / 1B	Mesic areas of chaparral, coastal prairie, and coastal scrub at elevations of 15-160 meters. Annual herb in the Boraginaceae family; blooms March-June.	**Not Present** No suitable habitat within the project site. Not identified during 2020 and 2021 biological surveys.
Plagiobothrys diffusus San Francisco popcorn-flower	— / SE / 1B	Coastal prairie and valley and foothill grassland at elevations of 60-360 meters. Annual herb in the Boraginaceae family; blooms March-June.	**Not Present** Low quality habitat is present within the project site. Not identified during 2020 and 2021 biological surveys.
Polygonum hickmanii Scotts Valley polygonum	FE / SE / 1B	Valley and foothill grassland on mudstone and sandstone at elevations of 210-250 meters. Annual herb in the Polygonaceae family; blooms: May-August.	**Not Present** No suitable habitat within the project site. The project site is outside the known elevation range of this species. Not identified during 2020 and 2021 biological surveys.
Senecio aphanactis Chaparral ragwort	— / — / 2B	Chaparral, cismontane woodland, and coastal scrub, sometimes on alkaline soils, at elevations of 15-800 meters. Annual herb in the Asteraceae family; blooms January-April.	**Unlikely** No suitable habitat within the project site.
Stebbinsoseris decipiens Santa Cruz microseris	— / — / 1B	Broadleaved upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub, and openings in valley and foothill grassland, sometimes on serpentinite, at elevations of 10-500 meters. Annual herb in the Asteraceae family; blooms April-May.	**Low** Suitable habitat is present within the project site; however, the CNDDB reports only one occurrence of this species within the quadrangles reviewed, located 7.3 miles from the project site.

Species	Status (Service/CDFW/CNPS)	General Habitat	Potential Occurrence within Project Site
Trifolium buckwestiorum Santa Cruz clover	— / — / 1B	Gravelly margins of broadleaved upland forest, cismontane woodland, and coastal prairie at elevations of 105-610 meters. Annual herb in the Fabaceae family; blooms April-October.	**Not Present** Suitable habitat is present within the project site; however, the project site is outside the known elevation range of this species, and this species was not identified during 2020 and 2021 biological surveys.
Trifolium hydrophilum Saline clover	— / — / 1B	Marshes and swamps, mesic and alkaline valley and foothill grassland, and vernal pools at elevations of 0-300 meters. Annual herb in the Fabaceae family; blooms April-June.	**Not Present** Low quality habitat is present within the project site. Not identified during 2020 and 2021 biological surveys.
Trifolium polyodon Pacific Grove clover	— / SR / 1B	Mesic areas of closed-cone coniferous forest, coastal prairie, meadows and seeps, and valley and foothill grassland at elevations of 5-120 meters. Annual herb in the Fabaceae family; blooms April-July.	**Not Present** Low quality habitat is present within the project site. Not identified during 2020 and 2021 biological surveys.

STATUS DEFINITIONS

Federal

FE = listed as Endangered under the federal Endangered Species Act
FT = listed as Threatened under the federal Endangered Species Act
FC = Candidate for listing under the federal Endangered Species Act
— = no listing

State

SE = listed as Endangered under the California Endangered Species Act
ST = listed as Threatened under the California Endangered Species Act
SC = Candidate for listing under California Endangered Species Act
SR = plants listed as Rare under the California Native Plant Protection Act
CFP = California Fully Protected Species
SSC = CDFW Species of Concern
— = no listing

California Native Plant Society

1B = California Rare Plant Rank 1B species; plants rare, threatened, or endangered in California and elsewhere
— = no listing

POTENTIAL TO OCCUR

Present = known occurrence of species within the site; presence of suitable habitat conditions; or observed during field surveys
High = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of suitable habitat conditions
Moderate = known occurrence of species in the vicinity from the CNDDB or other documentation; presence of marginal habitat conditions within the site
Low = species known to occur in the vicinity from the CNDDB or other documentation; lack of suitable habitat or poor quality
Unlikely = species not known to occur in the vicinity from the CNDDB or other documentation, no suitable habitat is present within the site
Not Present = species was not observed during surveys

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APPENDIX D

Site Photos

Photo 1. Staging area near Soquel Drive.

Photo 2. Staging area near Soquel Drive.

Photo 3. Staging and access area near Manhole 7.

Photo 4. Typical riparian habitat adjacent to project alignment.

Title: Site Photos

Date 6/2/2022
Scale
Project 2020-04

Monterey | San Jose
Denise Duffy and Associates, Inc.
Environmental Consultants Resource Planners
947 Cass Street, Suite 5
Monterey, CA 93940
(831) 373-4341

Appendix D

Photo 5. Typical manhole (Manhole 17).

Photo 6. Typical manhole adjacent to riparian (Manhole 27).

Photo 7. Manhole 40, will require small amount of riparian vegetation clearing.

Photo 8. Typical access to manholes via annual grassland.

Title: Site Photos

Date 6/2/2022
Scale
Project 2020-04

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Appendix D

Photo 9. Pipeline elevated crossing, coast live oak proposed for removal in foreground (Manhole 48).

Photo 10. Pipeline elevated crossing, coast live oak proposed for removal in foreground (Manhole 48).

Photo 11. Pump station wet well location.

Photo 12. Pump station wet well location.

Title: Site Photos

Date 6/2/2022
Scale
Project 2020-04

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Appendix D

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County of Santa Cruz

DEPARTMENT OF COMMUNITY DEVELOPMENT AND INFRASTRUCTURE

701 OCEAN STREET, FOURTH FLOOR, SANTA CRUZ, CA 95060-4070
Planning (831) 454-2580 Public Works (831) 454-2160

Matt Machado, Deputy CAO, Director of Community Development and Infrastructure

Carolyn Burke	Stephanie Hansen	Kent Edler	Steve Wiesner	Travis Cary	Kim Moore
Assistant Director	*Assistant Director*	*Assistant Director*	*Assistant Director*	*Director*	*Assistant Director*
Unified Permit Center	*Housing & Policy*	*Special Services*	*Transportation*	*Capital Projects*	*Administration*

NOTICE OF EXEMPTION

To: Clerk of the Board
701 Ocean Street, Room 500
Santa Cruz, CA 95060

Project Name: Rodeo Gulch Sewer and Pump Station Rehabilitation Project

Project Location: The project is approximately 1.5 miles long and includes two separate sewer sections: The upper section runs parallel to Rodeo Gulch Creek from Soquel Drive to just north of Capitola Road; the lower section runs mostly along surface streets from a private road in a mobile home park (APN 028-021-07) to the Rodeo Pump Station on Richmond Drive.

Assessor Parcel No.: Santa Cruz County Sanitation District Easements on the following parcels:

028-361-17, 028-361-16, 028-361-29, 029-121-02, 029-121-01, 025-202-38, 025-202-39, 025-202-40, 025-202-33, 025-202-37, 025-202-30, 025-202-17, 025-251-33, 028-081-25, 028-081-10, 028-361-18, 028-081-05, 028-081-04, 028-081-11, 028-081-12, 028-021-07, 029-261-01, 029-391-03, 029-031-11, 029-391-02, 029-391-09, 029-061-19, 029-061-46, 029-061-45, 029-061-44, 029-061-43, 029-061-42, 029-061-41, 029-341-02, 029-061-48, 029-061-55, 029-061-56, 029-341-01, 029-031-05, 025-211-02, 029-391-04, 029-391-01, 025-211-06, 029-031-06, 029-031-14, 029-061-53, 029-061-62, 029-061-54, 029-061-57, 029-061-61, 025-202-25, 025-202-24, 025-202-23, 025-202-36, 025-202-02, 025-202-18, 030-112-09, 029-261-03, 030-112-10

Project Applicant: Santa Cruz County Sanitation District

Project Description: The proposed project involves rehabilitating two deteriorated sections of an existing sewer main (Rodeo Gulch trunkline), repair and rehabilitation of a steel trestle sewer pipe bridge, and installation of an auxiliary wet well at the existing Rodeo Pump Station. The existing sewer system has structural defects in pipes, joints, manholes and other connections caused by age and deterioration that need to be repaired. The steel trestle pipe bridge has damaged frame members that require replacement and deteriorated paint that needs to be rehabilitated to prevent further damage to the structure. The work will be implemented as three separate construction projects: The Upper Rodeo Gulch Trunkline Rehabilitation will use a trenchless pipe lining method (cured-in-place pipe) to rehabilitate the existing underground pipe with minimal surface disturbance, and repair/repaint the existing pipe bridge. Some small segments of pipe will require replacement through conventional (open cut) trenching. The Lower Rodeo Gulch Trunkline Replacement will replace existing pipe using conventional trenching within paved roads and other previously disturbed areas, and the Rodeo Pump Station Capacity Upgrade will install a wet well within a paved area at the existing pump station.

Agency Approving Project: County of Santa Cruz

County Contact: Ashleigh Trujillo **Telephone No.** 831- 454-2160

Date Completed: 1/4/2023

This is to advise that the County of Santa Cruz has found the project to be exempt from CEQA under the following criteria:

Exempt status: (*check one*)

☐ The proposed activity is not a project under CEQA Guidelines Section 15378.
☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).
☐ The proposed activity is exempt from CEQA as specified under CEQA Guidelines Section 15061(b)(3).
☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.
☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).
☒ **Categorical Exemption**

§15301 (b)(d) Class 1. Existing Facilities

Reasons why the project is exempt:

The project involves the maintenance and repair of existing sewer infrastructure for the purpose of rehabilitating and maintaining public facilities and involves no expansion of the existing use. None of the exceptions in §15300.2 apply.

Signature: _____ Date: 1/4/2023 Title: Planner IV

Juliette Robinson