

Garin to Pleasanton Ridge Public Access Project

Initial Study/Mitigated Negative Declaration

East Bay Regional Park District

11 September 2026



Initial Study/Mitigated Negative Declaration Garin to Pleasanton Ridge Public Access Project

This document has been prepared by:



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In collaboration with:



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September 11, 2026

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1. Project Information

Project Title	Garin to Pleasanton Ridge Public Access Project
Lead Agency Name & Address	East Bay Regional Park District 2950 Peralta Oaks Court Oakland, CA 94605
Contact Person & Phone Number	Kim Thai (510) 544-2320
Project Location	The project site includes multiple properties in Alameda County and the City of Union City, including the former Chouinard property at 33853 Palomares Road in the unincorporated Castro Valley area north of Sunol, which would accommodate the proposed public access area and related amenities. Improvements would also occur on parcels at 94587 Palomares Road in Union City for a new trail connection into Garin Regional Park and realignment of the Stonybrook Trail, as well as on the former Owen property east of the Chouinard site, where public access would be opened on existing ranch roads. <u>Alameda County APNs:</u> APN 85A-6427-6, 85A-3900-1-5, 85A-3900-1-6, 85A-3900-1-1, 85A-3750-2-1, 85A-3750-2-5, 85A-3750-1-4 <u>Union City APNs:</u> 85A-5275-4, 85A-5275-9, 85A-5275-10
Project Sponsor's Name and Address	East Bay Regional Park District 2950 Peralta Oaks Court Oakland, CA 94605
General Plan Land Use Designation and Zonings	<u>Unincorporated Alameda County:</u> General Plan Designation: Resource Management (RM) Zoning: Planned Development (PD) and Agriculture (A) <u>City of Union City:</u> General Plan designation: Agriculture (A) Zoning: Agriculture (A)
Project Description	The proposed project would establish a regional trail connecting Garin and Pleasanton Ridge Regional Parks by enabling public access through the former Chouinard and Owen properties via a new access point and trail at Chouinard, realignment of a portion of the Stonybrook Trail within Garin, and a safe at-grade pedestrian crossing of Palomares Road to access existing ranch road trails on the Owen property.

1.1 CEQA Requirements

The Garin to Pleasanton Ridge Public Access Project (project) is subject to the provisions of the California Environmental Quality Act (CEQA) because it would cause a direct physical change in the environment and involves the issuance of discretionary approvals, permits, and entitlements. The East Bay Regional Park District (Park District) will serve as the lead agency for CEQA compliance because it is the public agency which has the principal responsibility for approving the project. The Park District has prepared this Initial Study/Proposed Mitigated Negative Declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed project. The purpose of this IS/MND is to:

- Provide a basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration or a Negative Declaration;
- Disclose potential project environmental impacts; and
- Inform the CEQA Lead Agency, responsible agencies, trustee agencies, and the public regarding the potential environmental impacts of the project.

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

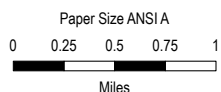
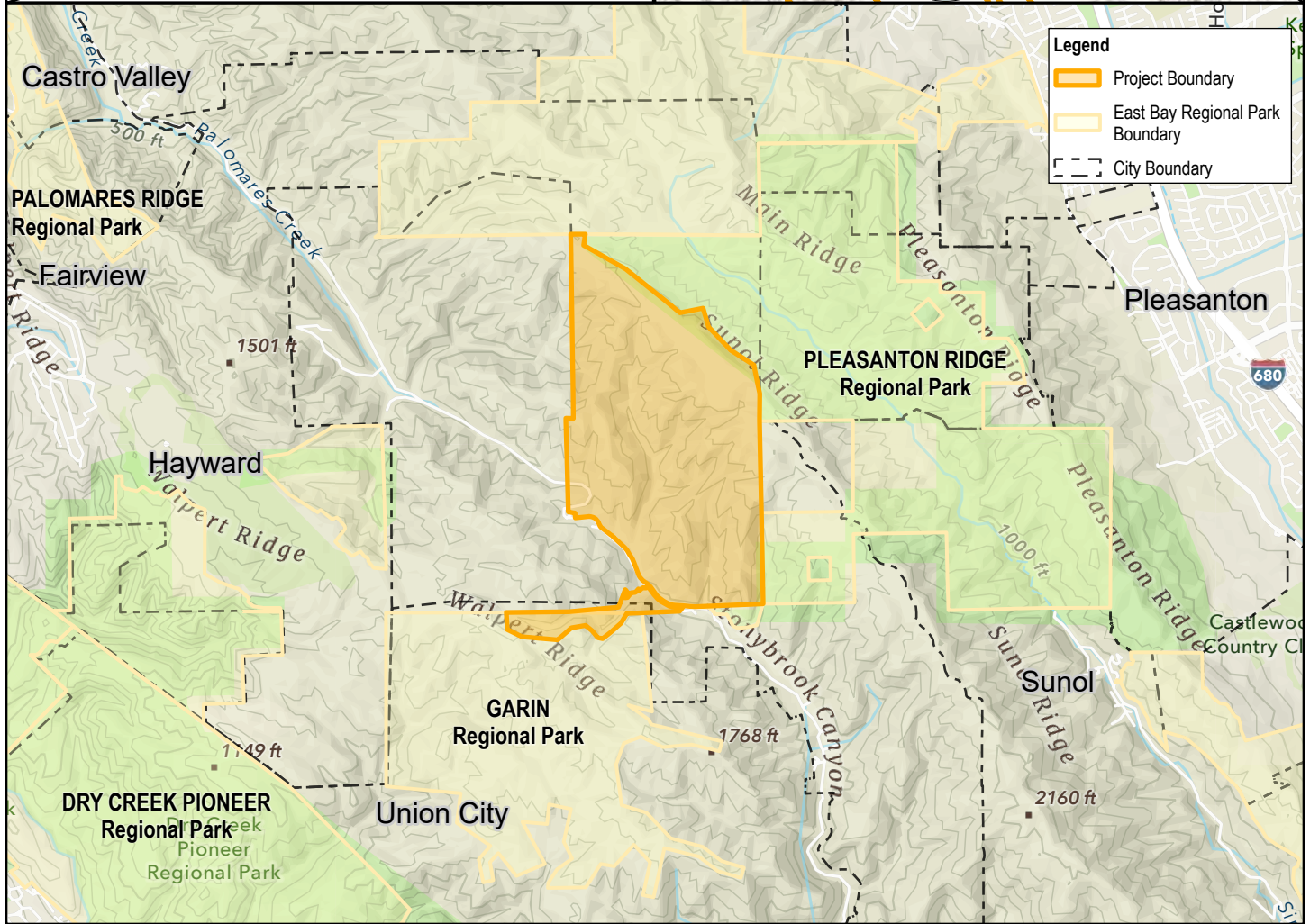
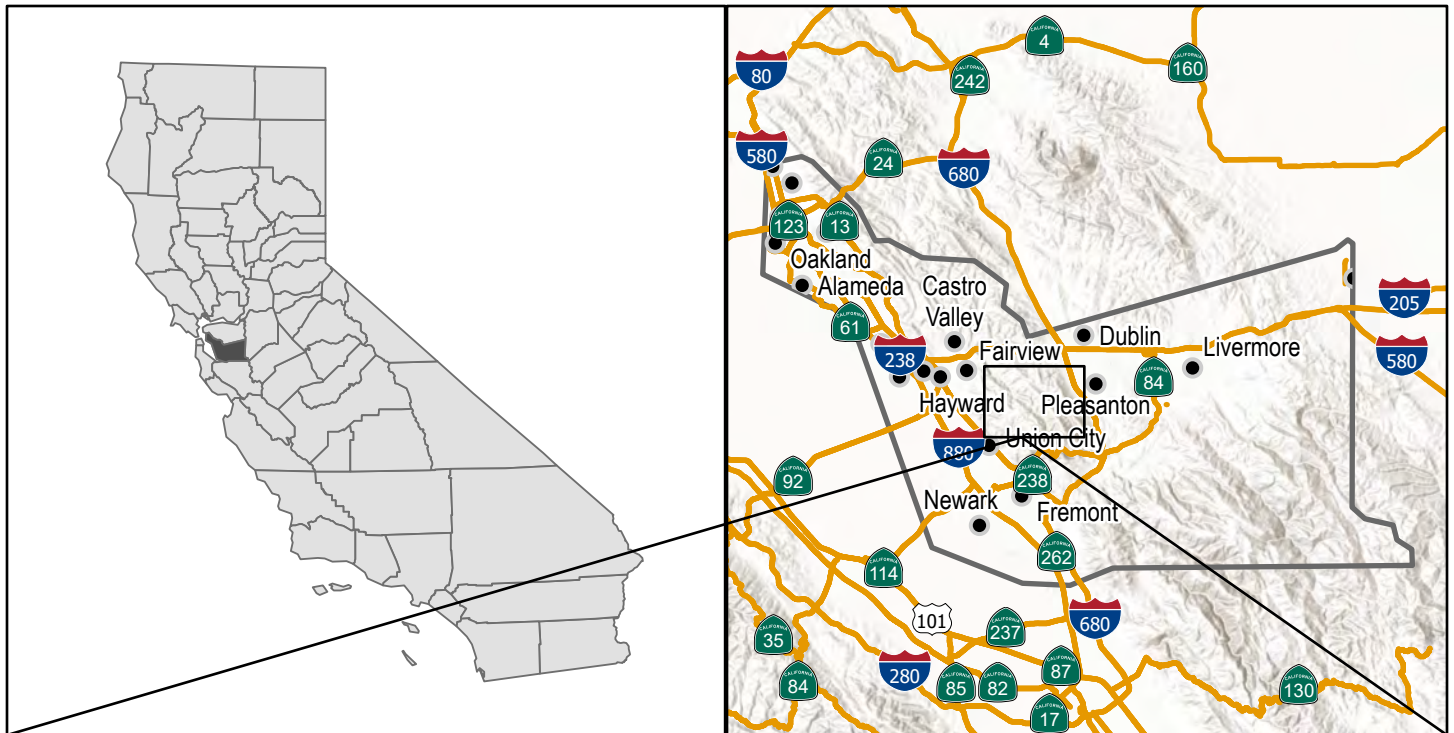
1.2 Project Location

The project site includes multiple properties located in Alameda County and the City of Union City (see Figure 1, Vicinity Map, and Figure 2, Project Location Map).

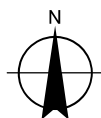
The Chouinard property, located at 33853 Palomares Road (APN 85A-6427-6) in the unincorporated area of Castro Valley, north of the town of Sunol, would accommodate the proposed public access area and related amenities.

Improvements would also occur within several parcels within Union City (APNs 85A-5275-4, 85A-5275-9, and 85A-5275-10), which would accommodate the proposed new trail connection from the Chouinard property into Garin Regional Park and the realignment of a portion of the existing Stonybrook Trail.

In addition, the project includes providing public access on existing ranch roads within the Owen property, located directly east of the Chouinard property across Palomares Road, on multiple parcels including APNs 85A-3900-1-5, 85A-3900-1-6, 85A-3900-1-1, 85A-3750-2-1, 85A-3750-2-5, and 85A-3750-1-4.



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

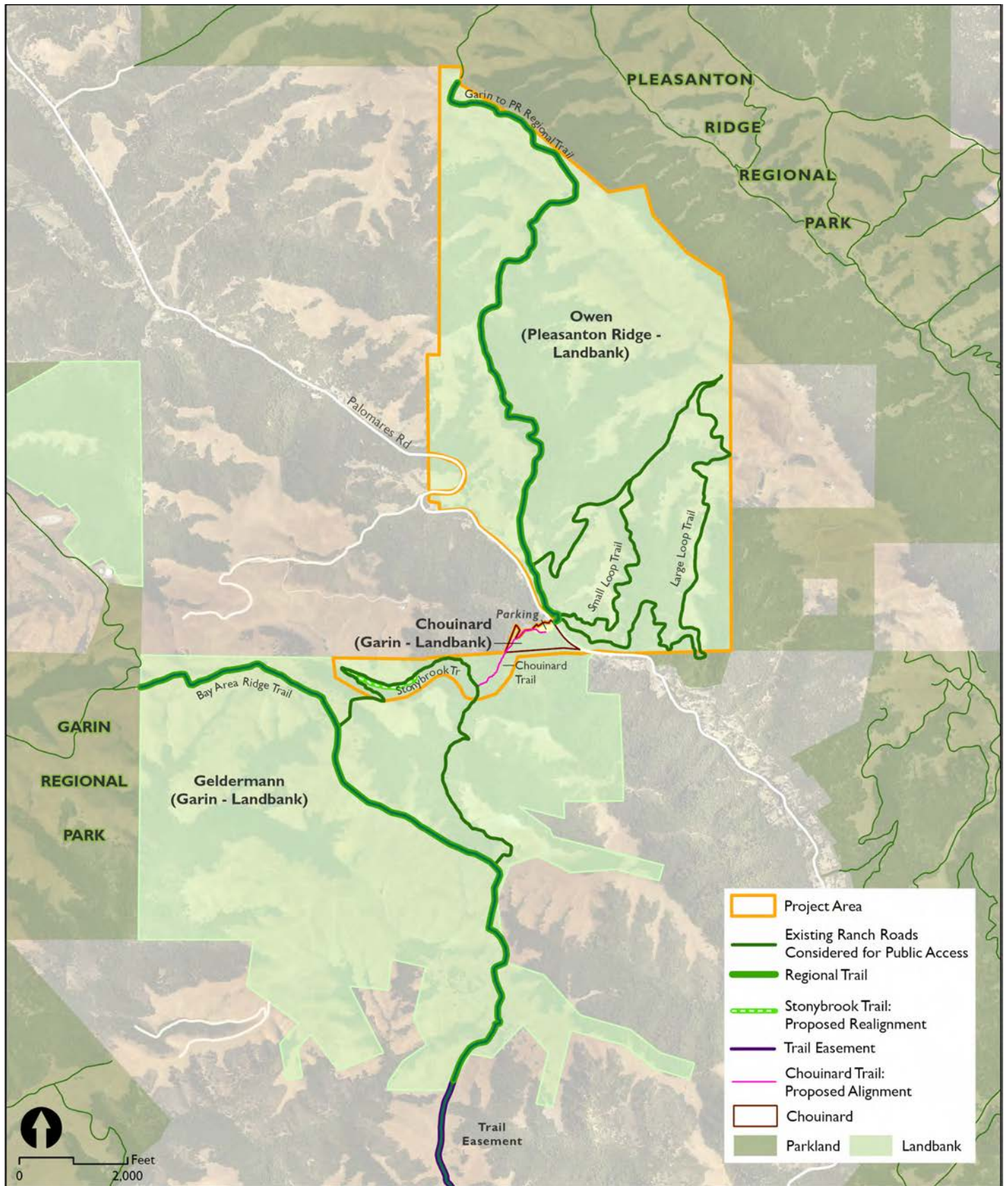


East Bay Regional Park District
Garin to Pleasanton
Ridge Public Access Project

Project No. 12612075
Revision No. -
Date May 2026

Vicinity Map

FIGURE 1



Paper Size ANSI A



East Bay Regional Park District
Garin to Pleasanton
Ridge Public Access Project

Project No. 12612075
Revision No. -
Date May 2026

Project Location Map

FIGURE 2

1.3 Project Background and Need

The Park District acquired the Owen property in 2011 and the Chouinard property in 2020. The Owen property was acquired for the purposes of expanding the boundary of Pleasanton Ridge Regional Park, providing public recreation, protecting natural resources, and preserving open space. The Chouinard property was acquired with the goals of expanding the boundary of Garin Regional Park and providing an opportunity to complete a portion of the Garin to Pleasanton Ridge Regional Trail identified in the Park District's Master Plan.

The Chouinard property is a former winery uniquely situated at the base of a narrow canyon that rises from Palomares Road up to Walpert Ridge, where there is a network of ranch roads within Garin Regional Park that have been designated as future recreational trails in the 2012 Garin and Dry Creek Pioneer Regional Parks Land Use Plan Amendment. Included in this future trail network is a planned extension of the Bay Area Ridge Trail along Walpert Ridge and adjacent ridgelines. Topography rises from slightly to steeply sloping terrain, most of which is covered by dense tree growth. An intermittent stream runs northeast through the narrow canyon that opens to the former winery compound, which includes a two-story 2,490 square foot converted barn, and approximately two acres where vineyards once grew at the base of this canyon. An approximately 9,700 square foot gravel parking area is ideally situated to serve as a future staging area for access into Garin and Pleasanton Ridge Regional Parks.

Access to the Owen property is directly from Palomares Road to the west of the Chouinard property. Pleasanton Ridge Regional Park surrounds the property to the north, east and south. The Owen property offers panoramic views of the San Francisco Bay Area, climbing from 990 feet at roadside to an elevation of 1,800 feet atop Sunol Ridge. Of its over eight miles of interior fire roads, approximately half are well-maintained. The property's existing road network provides well-developed trail access around the perimeter of the property, up to the top of the ridge, and immediately into adjacent parkland.

1.4 Environmental Setting

The project is located within unincorporated Alameda County and the northeastern edge of the City of Union City along Palomares Road. Palomares Road is a paved principal arterial roadway consisting of one travel lane in each direction. The primary public access and amenity improvements would occur on the Chouinard property, located at 33853 Palomares Road (APN 85A-6427-6), with portions of the proposed trail alignment extending into Union City. The Chouinard property is located within Garin Regional Park, and the Owen property is located within Pleasanton Ridge Regional Park.

Within unincorporated Alameda County, the project site is designated as Resource Management (RM) under the Alameda County General Plan and is zoned Planned Development (PD) and Agriculture (A). Within Union City, the project parcels are designated and zoned Agriculture (A). The project site is located on lands classified as "Grazing Land" under the California Department of Conservation's Farmland Mapping and Monitoring Program, and the Chouinard property is subject to a Williamson Act contract designated as Nonprime Agricultural Land, where compatible uses such as passive recreation are allowed.

The project site is located within the Stonybrook Creek watershed, a tributary to Alameda Creek within the San Francisco Bay Basin, and is subject to the Water Quality Control Plan for the San Francisco Bay Basin. The Basin Plan identifies designated beneficial uses for both Stonybrook Creek and Alameda Creek, as summarized in Table 1. Stonybrook Creek is not listed as impaired under Clean Water Act Section 303(d). Alameda Creek is listed as impaired for certain constituents, including Diazinon, Ammonia, Dissolved Oxygen, and Toxicity.

Table 1 *Designated Beneficial Uses of Stonybrook Creek and Alameda Creek*

Beneficial Use	Stonybrook Creek	Alameda Creek
Agricultural Supply (AGR)		X
Groundwater Recharge (GWR)		X
Commercial and Sport Fishing (COMM)		X
Cold Freshwater Habitat (COLD)	X	X
Fish Migration (MIGR)	X	X
Preservation of Rare and Endangered Species (RARE)	X	X
Fish Spawning (SPWN)	X	X
Warm Freshwater Habitat (WARM)	X	X
Wildlife Habitat (WILD)	X	X
Water Contact Recreation (REC-1)	X	X
Non-Contact Water Recreation (REC-2)	X	X

Note: Fishing is not permitted within streams on Park District land in the Alameda Creek watershed or within Stonybrook Creek.

The area proposed for public access improvements includes an existing two-story building located near Palomares Road, a shed structure to the south that houses two metal trailers, an existing parking area to the east and south of the two-story building, and various other outbuildings and landscape features, including rock walls, arbors, concrete pads, and vineyard rows. This developed area encompasses approximately 1.4 acres and is bordered by Palomares Road to the east, a steep north-facing slope to the south, and a tributary stream to the north and west. A small gravel parking area is located between the gated entrance along Palomares Road and the two-story building, and an existing at-grade creek crossing consisting of double culverts overlain by soil is located at the tributary.

1.5 Project Description

The proposed project would establish a regional trail connecting Garin and Pleasanton Ridge Regional Parks by enabling public access through the former Chouinard and Owen properties (see Figure 2, Project Location Map). This would be accomplished by constructing a staging area and improvements at the Chouinard property to provide a new access point and trail at the Chouinard property, realignment of a portion of the Stonybrook Trail within Garin, and a safe at-grade pedestrian crossing of Palomares Road to access existing ranch road trails on the Owen property (see Appendix A, Preliminary 30% Design Plans). The following provides a description of the various project components.

Chouinard Staging Area and Improvements

The project proposes development of a staging area with trailhead amenities at the Chouinard property (see Appendix A, Sheet No. L103, Public Access Site Plan, and Sheet No. L301, Public Access Site Cross Sections). Parking for approximately 11 vehicles, including one Americans with Disabilities Act (ADA)-compliant parking space, would be located within the existing gravel parking area. Additional overflow parking for approximately 4 to 8 vehicles could also be accommodated within the proposed truck turnaround areas near the restroom, as needed, and would be managed as part of staging area operations.

Two amenity areas with ADA-compliant paths of travel from the parking lot would provide space for educational and interpretive programming. An ADA-compliant single-stall vault toilet would be located at the

staging area. The project may also include certain trailhead amenities, such as picnic tables, benches, water fountain, trash and recycling receptables, bike racks, and interpretive signage.

Existing buildings and infrastructure at the Chouinard property would be demolished, including the two-story 2,490-square-foot former winery building located near Palomares Road, a shed structure to the south that houses two metal trailers, various other outbuildings, and landscape and developed features such as arbors, concrete pads, and vine rows (see Appendix A, Sheet No. L02, Public Access Demo Plan). The onsite leach field associated with the winery building is also proposed to be removed. Existing items that would remain in place include a rock wall and a water storage tank connected to a well.

New Trail into Garin

The project includes construction of approximately one-half mile of new multi-use trail (hiking, biking, and equestrian) connecting the proposed staging area on the Chouinard property to the existing trail network within Garin Regional Park (see Appendix A for trail locations, plans and profiles, and cross sections). The alignment would connect to the existing Stonybrook Trail on the Geldermann property and to the Bay Area Ridge Trail, and improvements would include minor grading, two low-water crossings (further described below), and slope stabilization using retaining walls. Trail widths would range from approximately 6 to 12 feet, with running slopes between approximately 8.5% and 16%.

Realignment of a Portion of Existing Stonybrook Trail

The existing Stonybrook Trail is a multi-use trail in Garin Regional Park that connects to the Bay Area Ridge Trail. An approximately 0.47-mile portion of the Stonybrook Trail is located within the floodplain of the existing creek. The project proposes realigning a portion of Stonybrook Trail to run along the adjacent hillside slope (see Appendix A for trail locations, plans and profiles, and cross sections). Proposed improvements for the realignment include minor grading and an at-grade creek crossing. Running slopes along this segment of the trail will range from 4.5% to 7.5% while maintaining a 6-foot-wide trail. Park District staff would allow the existing 0.47-mile portion located within the floodplain to restore naturally. The segment of Stonybrook Trail between the new trail connector and the realignment has a few ephemeral stream crossings. No improvements to these crossings are proposed as part of construction of the project. These existing crossings would be maintained as part of the ongoing park operations and maintenance as described below.

Development of an At-Grade Pedestrian Crossing of Palomares Road

The project proposes to provide a safe at-grade pedestrian crossing of Palomares Road. The following traffic safety improvements are proposed as part of this project:

- Increase visibility and awareness of the 25 mph speed limit signs
- Install 'Reduced Speed Limit Ahead' signs
- Install a high-visibility pedestrian crosswalk across Palomares Road
- Install speed limit and speed reduction markings on the pavement
- Evaluate installing speed humps or a raised pedestrian crossing near the intersection

Public Access in Owen

Public access is proposed along select existing ranch roads within the Owen property. Ranch roads were considered for public access based on existing conditions, surrounding natural and cultural resources, sustainability and ability to be maintained, use as a regional trail connection between Garin and Pleasanton

Ridge, and ability to provide additional looped trails to the trail network. This includes an approximately 2.6-mile segment on the western portion of the Owen property that would complete the Garin-to-Pleasanton Ridge Regional Trail, an approximately 1.9-mile small loop trail on the southern end of the Owen property, and an approximately 3.7-mile large loop trail on the southeastern portion of the Owen property. The 2.6-mile segment of the Garin-to-Pleasanton Ridge Regional Trail would connect with the existing Cowing Trail that is currently open for public access within Pleasanton Ridge park.

The remaining ranch roads not proposed for public access would continue to be used as service roads for Park Operations staff and grazing access or be decommissioned and restored for habitat. The ranch road segment identified for decommission has not been used as a service road and is already naturally overgrown with vegetation. Trail decommissioning work would be limited to allowing natural regrowth of vegetation to continue.

Existing ranch roads that would be used as service roads for Park Operations staff, and not intended for public access, would connect to the ranch roads converted to public access. To deter park visitors from using the service vehicle only road, signage would be installed to explicitly indicate that the road is for "Service vehicles only, no public access." Periodic monitoring of public trail use would occur once public access is provided. If park visitors are noted to be going off-trail or onto the service roads, adaptive management strategies such as additional fencing or plantings can be installed.

Trail Design and Construction Best Management Practices

All trail construction, modification, and restoration activities that are part of this project would be implemented in accordance with the Park District's Trail Construction and Modification Best Management Practices (BMPs). These Trail Construction and Trail Modification BMPs are provided in Appendix B and are incorporated into the project as Design Features. These BMPs are intended to minimize erosion, sedimentation, hydrologic alteration, and disturbance to natural resources during construction and long-term operation of the trail system.

BMPs include, but are not limited to, designing trails to contour along slopes rather than following fall lines; constructing trails on full-bench cuts to minimize cut-and-fill; out-sloping trails to promote sheet flow runoff; incorporating rolling dips and grade reversals to disperse surface water; minimizing trail widths to reduce soil disturbance; locating switchbacks and climbing turns on gentle slopes; and maintaining trail flow to reduce braking, skidding, and associated erosion.

In areas near creeks, drainages, or riparian corridors, BMPs include armoring trail surfaces where necessary, designing creek crossings to maintain natural channel form, grading trail approaches to prevent diversion of flows along trail alignments, and implementing erosion- and sediment-control measures such as silt fencing, straw wattles, vegetated buffers, and covered stockpiles.

Trail construction and maintenance would avoid placing soil, organic material, fuels, concrete, or other pollutants into waterways. Dewatering, if required, would only occur with appropriate water quality control measures in place. Trails located in areas with unstable soils or active landslides would be seasonally closed during wet conditions as necessary to protect park resources.

Trails determined to pose a resource protection or safety concern would be decommissioned and restored through removal of compacted soils, recontouring to match natural landforms, revegetation with native species, and physical and visual blocking to discourage use.

Slope Stabilization and Retaining Walls

The project would require slope stabilizing or retaining walls along the proposed parking area and several trail segments ranging from approximately 20 feet long to 780 feet long (see Appendix A, Sheet L501 for retaining wall details). Of the proposed slope stabilizing or retaining walls, two different types would be utilized: rockery walls and wood tie retaining walls, as further described below.

Rockery Wall

Rockery walls would consist of large interlocking rocks placed without the use of mortar, concrete, or steel reinforcements. Rock material would be sourced primarily from demolition of existing rock walls on the Chouinard property and from suitable rock encountered during project grading activities. If insufficient rock is available onsite, additional material would be imported. The walls would be designed by a qualified engineer and may include drainage features and geogrid reinforcement, as needed.

Wood Tie Retaining Wall

Wood tie retaining walls would consist of timber members installed to retain soil and stabilize slopes. The walls would be designed by a qualified engineer and may include anchoring or other structural elements as needed to maintain stability. The walls would provide drainage through the spaces between timber elements.

Water Crossings

The project would include development of four new crossings of seasonal tributaries to Stonybrook Creek. One at-grade water crossing using a rail car bridge would be located on the Chouinard property near the public access area and trailhead, one at-grade water crossing using a steel arch culvert would be located on the Stonybrook Trail realignment, and two articulated block, low-water crossings would be located on the new proposed trail section. These three crossing types are further discussed below. An existing low-water crossing across Stonybrook Creek at the southern end of the Owen property at the proposed public entrance into Owen would remain as-is to provide for seasonal access into the Owen property. See Appendix A, Sheet L101 for additional detail on water crossing locations and Sheet L502 for additional water crossing details.

Rail Car Bridge

A rail car bridge would be utilized at one at-grade water crossing along an unnamed tributary to Stonybrook Creek at the Chouinard property near the public access area and trailhead. Rail car bridges are pre-manufactured and use horizontal wooden planks attached to steel framing that spans the width of the creek. The bridge would have an abutment on each side of the creek composed of either concrete K-rails or gabion baskets. The abutments would be a minimum four feet deep. Rail car bridges require minimal maintenance of plank replacements and as-needed scour repair. The crossing would replace two existing double corrugated steel culverts overlain by soil. Each culvert is 3 feet in diameter and approximately 18 feet long. The culverts are undersized and overtop during large storm events, causing erosion.

Steel Arch Culvert

A steel arch culvert would be utilized at one at-grade water crossing along an unnamed tributary to Stonybrook Creek at the start of the Stonybrook Trail realignment. The steel arch culvert would span the existing drainage to create an at-grade crossing approximately 60 feet in length and 6 feet wide at the top to provide a crossing between 6 and 8 feet above the existing thalweg of the tributary. Arch culverts have an open bottom maintaining the existing flowlines and elevations, while allowing for a natural material drainage

bottom surface. Structure support for the steel culvert is achieved by means of a crushed rock layer, a minimum of 2 feet below the scour elevation. If the footing is placed above the scour elevation, rock slope protection will be placed within the creek and around the foundations to help reduce scour. Natural rock may be used to create structurally stable sides of the crossing to allow for soil backfill over the steel culvert to achieve a crossing at the existing top of bank elevation.

Articulated Block Crossing

Articulated block crossings would be utilized at two low water crossings along an unnamed tributary to Stonybrook Creek for the new proposed trail section. The streams at these locations are relatively flat with water at approximately three feet deep and the crossings are approximately 10 to 15 feet wide. Articulated block crossings use precast concrete interlocking, or cabled together, blocks with gaps to allow for water crossing at low flows with minimal impact to stream hydrology. Additionally, the articulated block crossings would stabilize the crossing location from erosion associated with trail use, as well as from high-flow events. As the blocks are locked together, it allows for flexibility to fit the existing contour of the stream, minimizing the grading needed.

1.6 Project Construction

Construction is anticipated to take approximately four months and would be completed within a single construction season. If feasible, vegetation clearing would be conducted outside of the nesting bird season, either prior to February 1 or after August 31. Construction activities would occur within the allowable construction hours specified by the Alameda County Municipal Code, and nighttime construction is not anticipated.

Grading would need to occur along the proposed new and modified trail alignments and within the public access area to achieve accessible slopes and suitable trail width. Minor cut slopes would be necessary. Similarly, fill would be placed and compacted along the alignment to establish the trail prism. Cut and fill would be balanced to prevent the need of off hauling excess soil.

Construction activities would include demolition of existing features within the proposed staging area; vegetation clearing, grubbing, and limited tree removal along the proposed trail alignments; grading and excavation to establish trail surfaces, parking improvements, and associated drainage features; hauling of materials to and from the site; pavement removal using jackhammering or grinding as needed; construction of concrete and asphalt paving within the driveway and parking area; installation of roadway striping and signage; and implementation of erosion and sediment control measures throughout the construction period. Construction would utilize typical heavy and light construction equipment, such as excavators, loaders, graders, dump trucks, paving equipment, rollers, concrete trucks, water tenders, and similar equipment. All construction activities would incorporate all applicable temporary and permanent erosion and sediment control BMPs to minimize environmental disturbance during construction, including implementation of the Park District's trail construction and modification BMPs described in Section 1.5 and Appendix B, as well as preparation of a Storm Water Pollution Prevention Plan (SWPPP) as described in Section 1.10.

The construction access would be from Palomares Road. From the south, construction traffic is anticipated to use Interstate 880 to State Route 84, then Palomares Road. From the north, access is anticipated to use Interstate 880 to State Route 238, then Palomares Road.

Stockpiling and staging areas would be located within the existing gravel parking area at the former Chouinard Winery site. Project activities associated with stockpiling and staging have been included in the environmental analysis. Excess soils, aggregate base, and construction materials would be stored on site within designated stockpiling and staging areas and may be reused on site for backfill and finished grading.

Excess materials would not be stockpiled or disposed of on site following completion of construction. Any remaining excess materials would be hauled off site for beneficial reuse, recycling, or lawful disposal.

Following construction, the contractor would demobilize and remove all construction equipment, materials, and wastes from the project site. Disturbed areas not part of the constructed trail, parking lot, or other public access improvements would be restored to pre-construction conditions or stabilized using a combination of grass seeding (broadcast or hydroseeding), straw mulch, rolled erosion control fabric, and native plant revegetation. Where required, revegetation efforts would include replanting and any necessary compliance monitoring to satisfy resource agency requirements associated with impacts to regulated habitats, such as riparian vegetation.

1.7 Ongoing Park Operations and Maintenance

In addition to existing park operations and regularly scheduled maintenance and upkeep of the park, the project's new facilities would be incorporated into the operation services of the larger regional parks and repaired on an as-needed basis to maintain the facilities in a safe and operable condition. Operation services could include opening and closing staging and trailhead gates, litter pick-up, and restroom facility maintenance.

Ongoing repairs and maintenance could include trail maintenance as appropriate, such as grading and/or mowing the trail surface, debris removal, replacement of existing culverts or drainage crossings as covered under the Park District's Routine Maintenance Permit, and installation of new drainage structures.

The Park District's Interpretive and Recreation Services Department would incorporate the project area into its Southeast Sector for interpretive programming and services, including natural, cultural, and historical walks, naturalist-led hikes, and talks, as well as interpretive panels that could be installed within the amenities area at the proposed staging area or along the trails proposed for public access.

1.8 Regulatory Permits, CEQA, and NEPA

As the CEQA Lead Agency, the Park District will be the agency considering approval of the project. Additionally, permits may be required from the following agencies, which may serve as Responsible or Trustee Agencies under CEQA and may need to issue approvals for the project:

- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- State Historic Preservation Office
- San Francisco Bay Regional Water Quality Control Board
- State Water Resources Control Board
- California Department of Fish and Wildlife
- Alameda County: Encroachment Permit, Building Permit, Grading Permit, Environmental Health

1.9 Tribal Consultation

The Park District contacted the Native American Heritage Commission (NAHC) on May 9, 2025, to request the Assembly Bill (AB) 52 Tribal Consultation list. The NAHC responded to Park District's request on May 13, 2025. The Park District distributed letters to the tribes/individuals on the Tribal Consultation list via electronic mail (email) and certified mail on July 21, 2025. Out of the individuals/tribes contacted, two California Native American tribes (the Confederated Villages of Lisjan Nation and the Costanoan Rumsen

Carmel Tribe) requested AB52 consultation. For a summary of cultural and tribal cultural resources, please refer to Section 3.5 (Cultural Resources) and Section 3.18 (Tribal Cultural Resources).

1.10 Compliance with Existing Regulations and Standard BMPs

The project would abide by the following applicable regulations and industry-accepted BMPs to reduce or avoid potential adverse effects associated with construction and operation. In addition to these BMPs, the Park District's Trail Construction and Modification BMPs are incorporated into the project (see Section 1.5 and Appendix B). In addition, mitigation measures are presented in the analysis sections in Chapter 3 to reduce potentially significant environmental impacts to below a level of significance. The project's Mitigation Monitoring and Reporting Program would include these actions to ensure implementation.

Implementation of Geotechnical Design Recommendations

As part of the project design process, the Park District has engaged a California-registered Geotechnical Engineer to conduct a design-level geotechnical investigation for the proposed project (Crawford & Associates 2024). Project design and construction must comply with the site-specific recommendations made in the geotechnical report and any subsequent geotechnical reports for the project. This will include design in accordance with the seismic and foundation design criteria, as well as site preparation and grading recommendations included in the report. The geotechnical recommendations will be incorporated into the final plans and specifications for the project and will be implemented during construction.

Implementation of Bay Area Air District Basic BMPs for Construction-Related Fugitive Dust Emissions

To limit dust, criteria pollutants, and precursor emissions associated with the construction activity, the Park District will include the following Bay Area Air District recommended basic best management practices in construction contract specifications for the project:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- All visible mud or dirt trackout onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Unpaved roads providing access to sites located 100 feet or further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.
- Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall also be visible to ensure compliance with applicable regulations.

Stormwater Pollution Prevention Plan (SWPPP)

The project will obtain coverage under State Water Resources Control Board Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities. This will include submittal of permit registration documents (notice of intent, risk assessment, site maps, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and certifications) to the State Water Resources Control Board. The SWPPP will address pollutant sources, non-storm water discharges resulting from construction, best management practices, and other specified requirements. The SWPPP will also include dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. A Qualified SWPPP Practitioner will oversee implementation, including visual inspections, sampling and analysis, and ensuring overall compliance.

2. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that requires mitigation to reduce impacts to less than significant, as indicated by the checklists on the following pages. No impacts were found to be “Potentially Significant Impact” requiring an environmental impact report:

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would be prepared.
- ☐ I find that the proposed MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect: (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Neoma Lavalle
Signature

9/11/26
Date

3. Environmental Analysis

3.1 Aesthetics

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

Environmental Setting

The project site is located within a non-urbanized area of Alameda County characterized by open space, rolling topography, and recreational parklands. The visual environment consists of gently sloping grassy hillsides, areas of low vegetation, and scattered trees that contribute to a rural and natural landscape character. The project area spans multiple properties, including portions of Garin Regional Park and Pleasanton Ridge Regional Park, which are managed for open space and passive recreational uses. Public views of the site and surrounding area are available from Palomares Road and from existing trail networks within the regional parks.

The approximately 10-acre Chouinard property contains a cluster of existing developed features associated with past agricultural and winery uses. These features include a circa 1939 two-story barn later converted to a winery, two one-story wood-frame storage buildings constructed between approximately 1987 and 1993, and a modern prefabricated storage building dating to the 1990s or later. The site is accessed from Palomares Road via a gravel driveway and is characterized by a dispersed layout, with the barn located toward the rear of the property and ancillary structures grouped closer to the site entrance. These developed elements are visible from portions of Palomares Road and nearby public vantage points. Photos illustrating existing conditions at the Chouinard property are provided in Figure 3 and Figure 4 below.



Figure 3 Existing Photo of Chouinard Property Looking East



Figure 4 Existing Photo of Chouinard Entrance Looking West from Palomares Road

The Owen property, located east of the Chouinard property, is characterized by expansive open space and ranchland conditions with minimal built improvements, similar to the broader visual context that includes

Garin Regional Park to the west of the Chouinard property. Existing ranch roads traverse the property and are generally consistent with the visual character of the surrounding parklands (see Figure 5). Overall, the visual setting is defined by a combination of rural, natural features and limited existing development, with an emphasis on open vistas, rolling terrain, and parkland resources.



Figure 5 *Existing Photo of Owen Property*

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

The proposed project is not located within a formally designated scenic corridor or identified scenic vista. Visible elements of the project would include a staging area with trailhead amenities, as well as new and improved dirt recreational trails, wayfinding signage, drainage crossings, and a new pedestrian crossing of Palomares Road. The project would also open public access into the Owen property by formalizing use of existing ranch roads for recreational hiking and biking. Project features would be low-profile and designed to follow existing topography, minimizing the need for grading and reducing visual contrast with the surrounding landscape. Improvements would not introduce visually dominant structures, would not alter ridgelines, and would be located at distances or positions that limit visibility from public vantage points. Due to their limited scale, siting, and consistency with existing conditions, project features would not obstruct or substantially degrade views from surrounding areas. The proposed project would not result in a substantial adverse effect on a scenic vista. The impact would be less than significant.

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

The proposed project is not located within the viewshed of an officially designated or eligible state scenic highway (Caltrans 2026). No impact would result.

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

The proposed project is located in a non-urbanized area. Visible elements of the project would include a staging area with trailhead amenities at the Chouinard property, as well as new and improved compacted earth and gravel recreational trails, wayfinding signage, drainage crossings, and a new pedestrian crossing of Palomares Road. The project would also open public access into the Owen property by formalizing use of existing ranch roads for recreational uses.

On the Chouinard property, the proposed project would remove the two-story former winery building and the shed structures and other outbuildings and features such as arbors, concrete pads, and vine rows. The project proposes the development of a staging area with trailhead amenities at the entrance of the property and visible from Palomares Road. Parking for approximately 11 vehicles including an ADA-compliant parking space would be located at the existing gravel parking area, along with potential for up to 8 additional spaces in an overflow parking area within the staging area.

Two amenity areas with ADA-compliant paths of travel from the parking lot would provide space for educational and interpretive programming. A single-stall vault toilet would also be located at the staging area, with opportunities for trailhead amenities including picnic tables, benches, water fountain, trash and recycling receptacles, bike racks, and interpretive signage.

The staging area would include oak tree and native grass planting to enhance visual integration with the surrounding landscape. Any tree removals required for project implementation would be replaced in kind, consistent with applicable park district policies.

Visual simulations illustrating the proposed staging area and trailhead amenities at the Chouinard property are provided in Figures 6 through 9 below.



Figure 6 *Simulation of Proposed Condition at Chouinard Property Looking East*



Figure 7 *Simulation of Proposed Condition at Chouinard Property Amenity Space*



Figure 8 *Simulation of Proposed Condition at Chouinard Property Entrance*

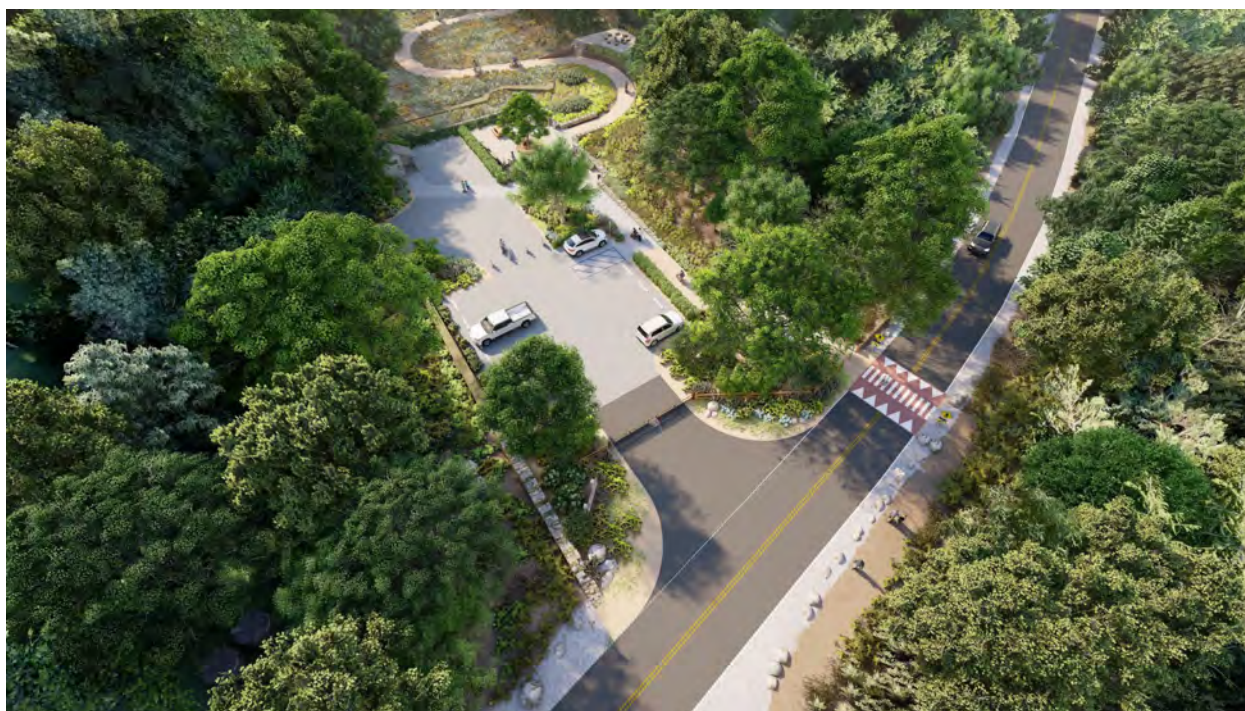


Figure 9 *Simulation of Proposed Condition at Chouinard Property Aerial View*

The proposed improvements at the Chouinard property would be modest in scale, low in profile, and consistent with the visual context of regional parklands. No visually dominant structures, extensive grading, or infrastructure incompatible with the surrounding landscape would be introduced. As a result, improvements at the trailhead staging area would not degrade the existing visual character or quality of public views of that improvement area. Although the proposed project would result in visual modifications to the project site, impacts to the visual character or quality of public views would be less than significant.

The proposed project would also include a new trail connection from the Chouinard property into Garin Regional Park and the realignment of a portion of the existing Stonybrook Trail within Garin Regional Park, along with water crossings. In addition, the project includes opening public access on existing ranch roads within the Owen property and installation of wayfinding signage.

Overall, the proposed improvements and access routes would generally follow existing trails and circulation patterns and would not introduce visually dominant features or substantial new grading. From public viewpoints, including Palomares Road and the trail network itself, the trails would appear consistent with the surrounding open-space and rural landscape character. Project features would be low-profile and designed to follow existing topography, minimizing the need for grading and reducing visual contrast with the surrounding landscape. Improvements would not introduce visually dominant structures and would not alter ridgelines. The introduction of managed public access along existing ranch roads within the Owen property would not alter its visual quality. Impacts to the visual character or quality of public views would be less than significant.

Construction activity would temporarily affect the visual character of the project site due to equipment, grading, demolition, and staging activities. The construction disturbance would be temporary in nature, and disturbed areas would be restored after construction. Therefore, the temporary construction impact would be less than significant.

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

Construction activities would be limited to daytime hours, therefore, no construction lighting would be required. The proposed project does not include new lighting, as the park is intended for daytime use only. However, the project may potentially include installation of a new exterior light mounted to an existing power pole at the proposed pedestrian crossing of Palomares Road. If not properly designed or shielded, the fixture could result in substantial light spill or glare affecting a residential sensitive receptor at 33853 Palomares Road. The impact is considered potentially significant. Implementation of Mitigation Measure AES-1 would reduce the potential impact to a less-than-significant level by requiring all outdoor lighting to be properly designed, directed, and controlled to avoid illumination of off-site areas and reduce glare.

Mitigation Measure AES-1

If exterior lighting is incorporated into the project at the proposed Palomares Road pedestrian crossing, the Park District shall ensure that all lighting fixtures are designed and installed to minimize light spill and glare consistent with best management practices for outdoor lighting in rural areas. Measures shall include, but are not limited to, use of fully shielded, downward-directed (full cutoff) fixtures to prevent light from projecting upward or horizontally, and installation of the minimum light intensity necessary to meet safety requirements. Where feasible, incorporation of timers, motion sensors, or other controls to limit the duration of nighttime lighting shall also be implemented.

3.2 Agriculture and Forest Resources

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

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (No Impact)

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) classifies agricultural land into categories based on soil quality and land use information. The project site is classified as "Grazing Land" on the 2022 Alameda County Important Farmland Map (DOC 2025). Grazing Land is defined in the FMMP as land on which the existing vegetation is suited for the grazing of livestock and is not classified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. No impact would result.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? (Less Than Significant)

A portion of the proposed project would occur on the Chouinard Winery parcel (APN 85A-6427-6), which in 2024 was enrolled into a Williamson Act contract, with a designation of "Nonprime Agricultural Land" (DOC 2026). The designation of "Nonprime Agricultural Land" under the Williamson Act generally includes land suitable for agricultural use that does not meet the criteria for prime agricultural soils. Under the Alameda County Uniform Rules and Procedures Governing Agricultural Preserves and Williamson Act Contracts, certain non-agricultural uses are allowed on contracted land provided they are compatible with continued agricultural and open-space purposes. Section II.C.2 identifies passive recreation, such as walking, hiking, and picnicking, as a compatible use on contracted land. The proposed project improvements for public

access and recreational use are consistent with the category of passive recreation, and would therefore be consistent with the list of compatible uses allowed under Alameda County's Uniform Rules for Williamson Act-contracted land. The impact would be less than significant.

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

The proposed project is not located on designated forest land or timberland and is not zoned as a Timberland Production Zone. Additionally, the proposed project site does not support forest resources as defined in the Public Resources Code, and is not managed or designated for forest use. No impact would result.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (No Impact)

The proposed project does not require off-site improvements, infrastructure extensions, or secondary development that would indirectly promote farmland or forest land conversion. Therefore, the proposed project would not facilitate conversion of surrounding agricultural lands to non-agricultural uses or interfere with ongoing or reasonably foreseeable agricultural activities. No impact would result.

3.3 Air Quality

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

a) Conflict with or obstruct implementation of the applicable air quality plan? (No Impact)

The proposed project is located within the San Francisco Bay Area Air Basin and within the jurisdiction of the Bay Area Air District (Air District), previously known as Bay Area Air Quality Management District (BAAQMD). The 2017 Bay Area Clean Air Plan is the applicable air quality management plan local air basin (BAAQMD 2017). The 2017 Clean Air Plan establishes a regional strategy to attain state and federal air quality standards through reduction of regional criteria pollutants, reduce community-scale health risks by minimizing local exposure to toxic air contaminants and particulate matter, and decrease greenhouse gas emissions to meet long-term climate protection targets.

The proposed project would be consistent with and supportive of the 2017 Clean Air Plan. The Park District acquired the property for public open space uses that are intended to improve public access and recreational opportunities. The proposed project is an open space project intended to improve public access and improve connectivity between the Garin and Pleasanton Ridge Regional Park. The project would facilitate non-motorized access to regional parkland by improving connectivity between Garin Regional Park and Pleasanton Ridge Regional Park. By providing a new public access point, constructing a new trail connection, and facilitating safer pedestrian access across Palomares Road, the project would encourage walking and recreation without reliance on motor vehicles.

The project is an open space and trail system improvement project, with no introduction of new stationary or substantial mobile emission sources. The project supports regional trail network efficiency, which is a recognized strategy for reducing VMT and associated GHG emissions in recreation contexts. The project implements applicable Clean Air Plan transportation control measures by expanding pedestrian and recreational access infrastructure, thereby reducing vehicle trips and associated emissions.

Construction-related emissions would be short-term and minimal, and the project does not include any operational sources that would generate ongoing emissions. In addition, the project would implement standard construction-phase best management practices to minimize fugitive dust, criteria pollutant emissions, and greenhouse gas emissions. These measures are consistent with the Clean Air Plan's

strategies to reduce regional pollutant emissions, minimize local exposure, and achieve long-term greenhouse gas reduction targets.

Following construction, the proposed project would not result in substantial new operational emissions. The proposed project would not result in new stationary emission sources, and would not cause regional growth that would increase emissions inconsistent with the 2017 Clean Air Plan. As a result, the proposed project would not conflict with or obstruct implementation of the 2017 Clean Air Plan. No impact would result.

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

The San Francisco Bay Area Air Basin is designated as nonattainment for ozone under state and federal ambient air quality standards, for particulate matter (PM₁₀) under state standards, and for PM_{2.5} under federal standards (Air District 2026).

Construction

Project construction activities would result in temporary, short-term emissions of criteria pollutants, including fugitive dust and equipment exhaust. Site preparation and project construction would involve grading of trail surfaces, building demolition, and the installation or upgrades of water crossings along the trail. Construction-related air quality effects from the proposed project would occur primarily during building demolition and trail construction and realignment activities. These activities would temporarily generate particulate matter (PM₁₀) emissions associated with the disturbance and handling of soils. Sources of fugitive dust would include exposed soils at work areas, staging areas, and along trail alignments. The quantity of PM₁₀ emissions would vary depending on the intensity and duration of construction activities, the extent of exposed soil surfaces, and site-specific factors such as soil characteristics, moisture content, and wind conditions.

For the purposes of this analysis, it is assumed that construction of the project would begin in 2030 and would require approximately four (4) months to complete. Construction-period emissions were estimated using the California Emissions Estimator Model (CalEEMod) (see Appendix C, Construction Emissions Calculations). Table 2 summarizes the project's estimated construction-related air pollutant emissions, which do not exceed the Air District's thresholds of significance. Additionally, the project includes implementation of Air District's recommended basic best management practices for construction-related fugitive dust emissions identified in Section 1.10 of this Initial Study. Therefore, impacts from construction-related emissions would be less than significant.

Table 2 Temporary Construction Emissions

Parameter	ROG Average Daily Emissions (lb/day)	NOx Average Daily Emissions (lb/day)	PM 10 Average Daily Emissions (lb/day)	PM 2.5 Average Daily Emissions (lb/day)
Project Construction Emissions	0.28	2.19	0.09	0.08
Thresholds of Significance	54	54	82	54
Threshold Exceeded?	No	No	No	No

Operation

The proposed project was evaluated against the screening criteria in Chapter 4 of the BAAQMD 2022 CEQA Guidelines, which provide project size thresholds for determining whether a project could result in potentially significant criteria air pollutant emissions. However, the screening criteria are intended for typical land use development projects and are based on operational characteristics such as building area and unit count. Regional parks are not a land use category addressed by the screening criteria. The proposed project does not include residential, commercial, or industrial development and would not generate substantial operational emissions sources. Following construction, the project would not result in new stationary emission sources or industrial sources, and operational activities would not overlap with construction-related activities. The proposed project is an open space project intended to improve public access and improve connectivity between the Garin and Pleasanton Ridge Regional Park. Some trips may be generated due to the users of the trail driving to the site, however, these trips are expected to be minimal and would typically not occur during peak traffic hours. The project would not cause growth or increased mobile source emissions that would substantially increase regional emissions of ozone precursors or particulate matter. Operational emissions associated with the proposed project would be minimal due to low-intensity recreational use. Therefore, the proposed project would not result in a cumulatively considerable increase in regional emissions of criteria pollutants. The operational impact would be less than significant.

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

Sensitive receptors are defined by the Air District as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. The nearest sensitive receptor to the proposed project site is the residence at 33853 Palomares Road, located adjacent to the proposed trailhead and staging area.

During construction, the proposed project would remove the existing winery building, shed, and other outbuildings associated with the former Chouinard winery site. The project would also remove the onsite sanitary sewer leach field associated with the former winery. Demolition and construction activities would be conducted compliant to applicable local, state, and federal regulations, including Air District requirements and Alameda County Environmental Health regulations. This would include measures for the safe handling and disposal of potentially hazardous building materials associated with the winery building and other structures. Prior to demolition, building materials would be surveyed, characterized, and then managed in accordance with applicable regulations to minimize the potential release of asbestos, lead-based paint, or other hazardous substances. Project construction activities would be temporary and would also be subject to applicable dust control and emissions reduction measures recommended in the BAAQMD CEQA Guidelines identified in Section 1.10 of this Initial Study. The impact from temporary construction activities would be less than significant.

Following construction, the proposed project would not result in new stationary emission sources and would not generate substantial mobile source emissions. Air emissions in the area and at the nearby residence would not substantially increase, and any temporary increases during demolition would be limited in duration and controlled. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant.

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

During construction, minor odors may result from the use of equipment, however, odors would be temporary and dissipate quickly from the source with increased distance. Following construction, the proposed project would not generate new odor emissions. The project would not include land uses or operations commonly associated with long-term odor generation, such as wastewater treatment facilities, landfills, industrial operations, composting activities, or livestock facilities. The impact would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?		✓		
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		✓		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			✓	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		✓		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

WRA Environmental Consultants prepared a Biological Resources Technical Report for the project (WRA 2025). The report identifies baseline environmental conditions within the project area and evaluates the potential for special-status plants, wildlife species, sensitive natural communities, and aquatic resources to occur and be affected by the project. The evaluation below is based on the findings of the report but incorporates updated information provided by Park District staff after the report was finalized. As a result, different potential-to-occur determinations and mitigation measures are used in some instances.

Environmental Setting

Special-status species are defined as those listed, proposed for listing, or candidates for listing as endangered or threatened under the federal Endangered Species Act (ESA) or the California Endangered Species Act (CESA). Additional special-status designations considered include California Department of Fish and Wildlife (CDFW) Species of Special Concern, U.S. Fish and Wildlife Service (USFWS) Birds of Conservation Concern, and special-status invertebrates. Although CDFW Species of Special Concern generally lack formal legal protection, they are afforded consideration under CEQA. Plant species listed on the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants with California Rare Plant Ranks (CRPR) 1, 2, or 4 are also considered special-status species under CEQA. Bat species designated as “High Priority” by the Western Bat Working Group (WBWG) are considered sensitive under

CEQA Guidelines Section 15380. Birds, including raptors, are protected under the federal Migratory Bird Treaty Act (50 CFR 10.13), and their nests, eggs, and young are further protected under the California Fish and Wildlife Code (§3503, §3503.5, and §3513).

Information on the potential for special-status species or communities to occur in the project area was compiled through a review of literature and databases, including the following:

- Soil Survey of Alameda Area, California
- Dublin 7.5-minute U.S. Geological Survey (USGS) quadrangle
- Contemporary aerial photographs
- Historical aerial photographs
- National Wetlands Inventory
- California Aquatic Resources Inventory
- California Natural Diversity Database records (CNDDDB)
- California Native Plant Society (CNPS) Rare Plant Inventory (RPI)
- Consortium of California Herbaria
- USFWS Information for Planning and Consultation (IPaC)
- eBird Online Database
- California Bird Species of Special Concern in California
- California Amphibian and Reptile Species of Special Concern
- A Field Guide to Western Reptiles and Amphibians
- A Manual of California Vegetation, Online Edition
- Preliminary Descriptions of the Terrestrial Natural Communities
- California Natural Community List
- Database searches (i.e., CNDDDB, CNPS) for special-status species focused on the Dublin and eight surrounding USGS 7.5-minute quadrangles.

Additionally, WRA biologists visited the project area on May 4 and June 1, 2023, and August 8, 2024, to map vegetation, aquatic features, and other land cover types; document plant and wildlife species present; and evaluate on-site habitat for the potential to support special-status species as defined by CEQA.

Special-Status Plants

The review of literature and databases indicates the following ten special status plant species have potential to occur within the project area.

- Bent-flowered fiddleneck (*Amsinckia lunaris*). Rank 1B.2. **High Potential.**
- Big-scale balsamroot (*Balsamorhiza macrolepis*). Rank 1B.2. **High Potential.**
- Oakland star-tulip (*Calochortus umbellatus*). Rank 4.2. **High Potential.**
- Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*). CRPR 1B. **Moderate Potential.**
- Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*). Rank 4.3. **Moderate Potential.**
- Fragrant fritillary (*Fritillaria liliacea*). Rank 1B.2. **Moderate Potential.**
- Diablo helianthella (*Helianthella castanea*). Rank 1B.2. **Moderate Potential.**
- Bristly leptosiphon (*Leptosiphon aureus*). Rank 4.2. **Moderate Potential.**
- Michael's rein orchid (*Piperia michaelii*). Rank 4.2. **Moderate Potential.**

- Lobb's aquatic buttercup (*Ranunculus lobbii*). Rank 4.2. **Moderate Potential.**

An additional 50 species documented within the greater project vicinity are unlikely or have no potential to occur for one or more of the following reasons: hydrologic conditions, edaphic (soil) conditions, topographic conditions, pH conditions, vicinity of associated natural communities, and the geographical isolation of the project Area or known mapped occurrences. During the three protocol-level surveys, none of the above special status species were observed.

One locally rare plant species, stinging phacelia (*Phacelia malvifolia* var. *malvifolia*), was documented within the study area. Stinging phacelia is designated as a Rank A2 species. Five individuals were observed during surveys on June 1, 2023, within a small rocky opening in the east-central portion of the study area. The occurrence is restricted to a single location, and the proposed trail alignment has been designed to fully avoid the area where the species occurs.

Special-Status Wildlife

The review of literature and databases indicates the following 17 special status wildlife species have a potential to occur within the project area:

- California red-legged frog (*Rana draytonii*). Federal Threatened Species, CDFW Species of Special Concern. **Present.**
- San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). CDFW Species of Special Concern. **Present.**
- Northwestern pond turtle (*Actinemys marmorata*). Federal Proposed Threatened, CDFW Species of Special Concern. **High Potential.**
- Northern harrier (*Circus hudsonius*). CDFW Species of Special Concern. **Present.**
- White-tailed kite (*Elanus leucurus*). CDFW Fully Protected Species. **Present.**
- Golden eagle (*Aquila chrysaetos*). Federal Eagle Protection Act, CDFW Fully Protected Species. **Present.**
- Loggerhead shrike (*Lanius ludovicianus*). CDFW Species of Special Concern, USFWS Bird of Conservation Concern. **Moderate Potential.**
- Yellow warbler (*Setophagia petechia brewsteri*). CDFW Species of Special Concern, USFWS Bird of Conservation Concern. **Moderate Potential.**
- Crotch's bumble bee (*Bombus crotchii*). State candidate. **Moderate Potential.**
- Alameda whipsnake (*Masticophis lateralis euryxanthus*). Federal Threatened Species, State Threatened Species. **Likely Present.**
- Hoary bat (*Lasiurus cinereus*). WBWG Medium Priority. **High Potential.**
- Pallid bat (*Antrozous pallidus*). CDFW Species of Special Concern, WBWG High Priority. **Moderate Potential.**
- Western red bat (*Lasiurus blossevillei*). CDFW Species of Special Concern, WBWG High Priority. **High Potential.**
- Townsend's big-eared bat (*Corynorhinus townsendii*). CDFW Species of Special Concern, WBWG High Priority. **Moderate Potential.**
- American badger (*Taxidea taxus*). CDFW Species of Special Concern. **Likely Present.**
- Mountain lion (*Puma concolor*). Southern California and Central Coast ESU. State Candidate. **Present.**
- Steelhead (*Oncorhynchus mykiss irideus* pop. 8). Central California Coast DPS, Federal Threatened. **Moderate Potential.**

California red-legged frog, San Francisco dusky-footed woodrat, Northern harrier, white-tailed kite, golden eagle, and mountain lion are considered present within the study area, while Alameda whipsnake and American badger are considered likely present. A California red-legged frog occurrence and active San Francisco dusky-footed woodrat nests were documented during field surveys conducted on May 4, 2023 for the Biological Resources Technical Report. Northern harrier, white-tailed kite, and golden eagle are considered present based on documented occurrences in the vicinity and the availability of suitable nesting and foraging habitat within and adjacent to the study area. Mountain lion is considered present based on documented breeding activity and previous detections within the Pleasanton Ridge area. Alameda whipsnake is considered likely present due to known occurrences in the project vicinity and designated critical habitat within the study area. American badger is considered likely present based on suitable habitat and prior detections in the vicinity.

An additional 22 species documented within the greater project area are unlikely or have no potential to occur for one or more of the following reasons: lack of vernal pools, lack of tidal marsh areas, lack of old growth coniferous forest, lack of sandy beaches or loose-textured sandy soils, lack of vertical cliffs and bank cuts, and lack of caves, or mine shafts. In addition, California Tiger Salamander (*Ambystoma californiense*) is unlikely to occur as the project area is outside of dispersal distance from known occurrences and documented breeding habitat which is located approximately 1.75 miles from the project area. While there are ponds closer to the project area, survey results at these ponds have been negative for CTS.

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

Special-Status Plants

Qualified botanists conducted three protocol-level plant surveys during a period sufficient to identify all special-status plant species with the potential to occur. During a protocol-level plant survey conducted on June 1, 2023, one locally rare species, stinging phacelia (*Phacelia malvifolia* var. *malvifolia*), which is listed as "A2" in the *Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties*, was identified as present within the project area. Stinging phacelia is an annual herb in the waterleaf family (*Hydrophyllaceae*). This species blooms from April to July. Five individuals of stinging phacelia were observed on June 1, 2023, in the east-central portion of the project area. It occurred, in a small, rocky opening within the California Bay – Coast Live Oak / Poison Oak Forest land cover type. Associated species include, but are not limited to, western lady fern (*Athyrium filix-femina* var. *cyclosorum*), poison oak, California maidenhair fern (*Adiantum jordanii*), field hedge parsley (*Torilis arvensis*), and Danny's skullcap (*Scutellaria tuberosa*). As stinging phacelia is restricted to a single location within the project area, and grading associated with the proposed trial alignment is slated to fully avoid the area where this plant occurs, no impacts to special-status plants will occur.

California Red-legged Frog

California red-legged frog (CRLF) is dependent on suitable aquatic, aestivation, and upland habitat. During periods of wet weather, starting with the first rainfall in late fall, red-legged frogs disperse away from their aestivation sites to seek suitable breeding habitat. Aquatic and breeding habitat is characterized by dense, shrubby, riparian vegetation and deep, still, or slow-moving water. Breeding occurs between late November

and late April. CRLF aestivate (period of inactivity) during the dry months in small mammal burrows, moist leaf litter, incised stream channels, and large cracks in the bottom of dried ponds.

This species was observed in the iris-leaf rush seep within the project area during the site visit conducted on May 4, 2023. Several stock ponds known to support CRLF breeding occur within 1.5-miles of the project area and aquatic habitats within the area are likely used by CRLF as movement corridors in the winter and spring months when water is present. The closest such pond is located approximately 0.3 miles away from the project area. Grassland habitat within the project area and surrounding area may provide suitable upland refugia for this species. The project area is not within designated critical habitat for CRLF; however, critical habitat for CRLF is present approximately 0.5-miles to the north and northeast.

Project construction activities, including grading, vegetation removal, and equipment operation, could result in the injury or mortality of CRLF individuals. Indirect impacts may also occur through construction-related runoff or sedimentation that could adversely affect nearby aquatic habitat used by the species. In addition, vegetation removal could reduce the availability of suitable cover for CRLF during upland dispersal, potentially increasing exposure to predators and environmental stressors. These impacts are potentially significant.

Implementation of Mitigation Measures BIO-1 through BIO-12 would reduce the potential impacts to the California red-legged frog to a less-than-significant level.

Mitigation Measure BIO-1

The Park District shall compensate for permanent and temporary impacts to suitable CRLF habitat identified in the Biological Resources Technical Report. Compensation may be achieved through the purchase of mitigation credits from a conservation bank approved by the USFWS with a Service Area that covers the project site, or through implementation onsite habitat restoration, enhancement, or creation pursuant to a Habitat Mitigation and Monitoring Plan (HMMP) approved by USFWS, or another compensatory mitigation mechanism approved by USFWS. Permanent impacts shall be mitigated for at a 3:1 mitigation ratio and temporary impacts at a 1:1 mitigation ratio, unless otherwise stipulated in the Programmatic Biological Opinion issued by the USFWS (08ESMFOO-2012-F-0092-1). Any required mitigation credits shall be purchased, or any approved onsite habitat mitigation measures shall be implemented or otherwise secured, prior to impacts to suitable CRLF habitat.

Mitigation Measure BIO-2

The Park District shall have a qualified biologist or biological monitor provide a worker environmental training program to all personnel involved in project construction. At a minimum, the employee education program shall consist of a brief presentation by persons knowledgeable about the biology of sensitive species with potential to occur in the project footprint, and about their legislative protection to explain concerns to contractors and their employees involved with implementation of the project. The program will include a description of this species and its habitat needs, any reports of occurrences in the area, an explanation of the status of these species and their protection under State and Federal legislation, and a list of measures being taken to reduce impacts to these species during construction.

Mitigation Measure BIO-3

An exclusion fence cannot be established around the entire site due to the variety of topography and hydrologic conditions in the project area; therefore, the Park District shall have an exclusion fence (such as silt fencing) installed around any staging and storage areas only. The exclusion fence will

stand at least 2 feet high and be buried at least 6 inches deep or will otherwise be secured along the bottom to prevent wildlife from passing underneath (i.e., with sandbags or similar materials). The fence shall be made of an opaque material (such as silt fencing). Any access gates will be closed each night and secured to prevent entry by CRLF or other nocturnal amphibians. The qualified biologist shall evaluate whether wildlife escape funnels or similar features are warranted based on site conditions and the duration of fencing deployment. If no vegetation is present within 25 feet of the exclusion fence, cover boards will be placed approximately every 100 feet to provide intermittent cover for CRLF or other amphibians. If vegetation is present within 25 feet, no cover boards are necessary. The exclusion fence will be surveyed daily by a qualified biologist or designated individual to identify and address issues that could allow CRLF or other special-status species to enter the construction staging area.

Mitigation Measure BIO-4

The Park District shall have a qualified biologist be present for the duration of the following project activities:

- Installation of wildlife exclusion measures;
- Initial vegetation removal;
- Initial grading or grubbing;
- Any relocations of special-status species

Mitigation Measure BIO-5

The Park District shall implement the following prior to the commencement of work with wheeled or tracked equipment in vegetated areas. Vegetation that could conceal sensitive species shall be surveyed by a qualified biologist or biological monitor. If vegetation is too dense to be adequately surveyed (e.g., thick bushes, etc.), a qualified biologist or biological monitor will observe vegetation removal until vegetation is cleared sufficiently for the biologist to survey the area and verify the presence or absence of amphibians (or reptiles). If no amphibians (or reptiles) are found, the vegetation shall be fully removed, and work may continue. If CRLF are observed, they shall be relocated by a qualified biologist according to the procedure outlined in Mitigation Measure BIO-7.

Mitigation Measure BIO-6

The Park District shall implement the following once initial vegetation removal or grading is complete. A morning pre-construction check may be conducted by a biological monitor, or designated individual who has been trained by the qualified biologist. The inspection shall occur prior to initiation of project activities each day and include an inspection of all work areas, staging/stockpiling areas, and all equipment and vehicles. If a qualified biologist, biological monitor, or designated individual, determines that sensitive species are not present within the work area, work may commence. However, if a CRLF is observed, work will be stopped and the qualified biologist will be notified. The qualified biologist, any biological monitors, and designated individuals shall have stop-work authority.

Mitigation Measure BIO-7

If any CRLF are observed in the project area, the Park District shall implement the following measures. As authorized under obtained permits, the qualified biologist shall first provide the CRLF an opportunity to leave the work area voluntarily. If the CRLF does not voluntarily disperse from the

work area, a qualified biologist shall capture and relocate the individual(s) to suitable habitat outside of the project area. Capture will proceed as follows:

- a. Prior to handling the animal(s), the biologist will assure their hands are free of toxins (i.e., sunscreen, bug repellent, etc.) or they may use moistened latex or nitrile gloves to handle/capture the animal(s).
- b. A clean bucket containing moist leaf litter, or a sponge moistened with non-chlorinated water will be used to hold and transport the animal(s).
- c. The qualified biologist will capture the animal by hand, or with the use of appropriate tools (e.g., dip net).
- d. The animal will be relocated outside of the Project area, at least 200 feet to similar riparian or aquatic habitat.
- e. Information regarding the capture including number of individuals, date, time, approximate size, sex (if known), capture location coordinates, and release location coordinates will be recorded, along with any other relevant information.
- f. Any equipment used for relocation or capture will be properly decontaminated according to standard protocols for the species before and after use.

Mitigation Measure BIO-8

The Park District shall have all construction activities cease one half-hour before sunset and shall not begin prior to one half-hour after sunrise.

Mitigation Measure BIO-9

The Park District shall not allow construction activities to occur for 24 hours after rain events that deliver >0.25 inches of rain without the presence of a full-time qualified biologist onsite to monitor activities.

Mitigation Measure BIO-10

The Park District shall have covered any open holes or trenches greater than 12 inches deep or have escape ramps no steeper than 45 degrees installed at the end of each working day to prevent CRLF or other species from becoming entrapped. Open holes or trenches shall be inspected by a qualified biologist for entrapped wildlife before work begins.

Mitigation Measure BIO-11

The Park District shall Implement erosion control measures throughout all areas of the project where sediment runoff from construction may enter adjacent waters. This will include the use of one or more of the following: construction fencing, straw wattles, and/or other appropriate stormwater pollution prevention measures to be placed around the aquatic resources to minimize sediment and/or pollutants from entering aquatic features. Erosion control measures will be monitored for effectiveness and will be repaired or replaced as needed.

Mitigation Measure BIO-12

The Park District shall not allow fueling, cleaning, or maintenance of vehicles or equipment to take place within any areas where an accidental discharge may cause hazardous materials to enter waterways. Any equipment or vehicles used for the project will be checked and maintained daily to prevent leaks of fluids that could be deleterious to aquatic habitat. All refueling and maintenance of

equipment, other than stationary equipment, will occur outside of the top-of-bank. No equipment will operate from within the channel (top of bank to top of bank).

San Francisco Dusky-footed Woodrat

Dusky-footed woodrat is present in riparian habitat within the study area. Several potentially active woodrat nests were observed during the site visit conducted by WRA on May 4, 2023. As such, project activities may directly impact dusky-footed woodrat by destroying active nests during trail construction, if nests are not avoided. In addition, the project may result in indirect impacts to dusky-footed woodrat through an increase of noise, introduction of pathogens, and presence of domestic pets. The potential impact is considered significant. Implementation of Mitigation Measure BIO-2 (described above) and BIO-13 would reduce the potential impacts to San Francisco dusky-footed woodrat to a less-than-significant level.

Mitigation Measure BIO-13

Prior to vegetation removal and/or ground disturbance within suitable habitat, the Park District shall have a pre-construction survey for woodrat structures/houses conducted by a qualified biologist. Any woodrat structures found during the survey shall be flagged and avoided to the fullest extent feasible.

If avoidance of nest structures is not possible, the project proponent shall submit a woodrat nest relocation plan to CDFW for approval. Nest structures that cannot be avoided shall be dismantled by hand under the supervision of a qualified biologist and in accordance with CDFW-approved methodology. Dismantled nest material shall be moved to adjacent vegetated areas that will not be disturbed. If woodrat young are encountered during the dismantling process, the material shall be placed back on the house and a work exclusion buffer of at least 50 feet shall be placed around the structure for a minimum of two weeks to allow the young to mature and leave the nest on their own accord, unless otherwise approved by CDFW.

Alameda Whipsnake

The study area occurs within designated critical habitat for Alameda whipsnake and may support this species. As such, indirect impacts to Alameda whipsnake may occur through the destruction of habitat. If individuals are present within the project footprint, direct impacts may occur due to interactions with construction traffic or entrapment in open trenches/holes, equipment, or materials. In addition, individuals may seek refuge in equipment or materials overnight and use of equipment or materials with these species inside may cause mortality. These impacts are potentially significant.

Implementation of Mitigation Measures BIO-14 and BIO-15, in addition to Mitigation Measure BIO-2, BIO-3, BIO-4, BIO-5, BIO-6, BIO-8, and BIO-10 (described previously), would reduce the potential impacts to Alameda whipsnake to a less-than-significant level.

Mitigation Measure BIO-14

The Park District shall purchase mitigation credits from a mitigation bank approved by the USFWS and CDFW with a Service Area that covers the project site to compensate for impacts to suitable Alameda whipsnake habitat associated with the project. Permanent impacts will be mitigated for at a 3:1 mitigation ratio and temporary impacts at a 1:1 mitigation ratio, unless otherwise approved by the USFWS and CDFW. Currently, credits are available from the Ohlone West Conservation Bank and would need to be approved by the USFWS and CDFW before purchase. These credits would be purchased prior to any impacts to Alameda whipsnake habitat.

Mitigation Measure BIO-15

If a snake of any species is observed during any point of the project, the Park District shall immediately halt work in the area, all equipment shall be powered off, and work shall not continue until the snake species can be identified by the qualified biologist. The snake shall first be afforded the opportunity to leave the work area on its own. If the snake is not Alameda whipsnake, then either the qualified biologist or biological monitor shall move the snake out of harm's way prior to work proceeding. If an Alameda whipsnake is discovered outside of exclusion fencing, work activities in the immediate vicinity shall not resume until the animal has left the project area of its own volition. If an Alameda whipsnake is observed within exclusion fencing or in another situation where it cannot safely leave the work area on its own, a qualified biologist shall relocate the animal to suitable habitat outside the project area in accordance with permit conditions. The Park District shall notify the appropriate resource agencies, as required, and demonstrate compliance with the CESA and ESA prior to resuming project activities.

Northwestern Pond Turtle

Northwestern pond turtle may disperse through Stonybrook Creek and its tributaries during periods of high flow and could utilize adjacent uplands for nesting, if present. Project construction activities, including stream crossing installation and grading within adjacent upland areas, could result in direct impacts to Northwestern pond turtle individuals. Indirect impacts may also occur through construction-related runoff or sedimentation that could degrade downstream aquatic habitat used by the species. These impacts are potentially significant. Implementation of Mitigation Measure BIO-16, in addition to Mitigation Measure BIO-2, BIO-11, and BIO-12 (described previously), would reduce the potential impacts to Northwestern pond turtle to a less-than-significant level.

Mitigation Measure BIO-16

Prior to the initiation of construction activities within or adjacent to suitable Northwestern pond turtle habitat, a qualified biologist shall conduct a pre-construction survey of the work area and accessible adjacent habitat. The survey shall be conducted immediately prior to the start of construction activities in suitable habitat. If a Northwestern pond turtle is observed within the work area, work in the immediate vicinity shall cease until the animal has left the area on its own or, if necessary and authorized, has been relocated by a qualified biologist in accordance with applicable agency approvals and permit conditions. Any relocation shall be coordinated with CDFW and USFWS, as appropriate.

Steelhead

Steelhead have been documented in the lower sections of Stonybrook Creek and may have the potential to occur in the study area during portions of the year when water is present. However, waters within the study area are ephemeral or intermittent, and as such do not provide year-round habitat for steelhead. To avoid direct effects to steelhead, project activities within Stonybrook Creek and tributaries will occur during the dry season (June 1 through October 31) when flowing water is not present. Restricting work to this period would avoid any potential for direct impacts and eliminate the need for water diversion and fish. Working when the streams are naturally dry, as well as the implementation of Mitigation Measure BIO-11 and BIO-12 (described previously) will reduce potential impacts to steelhead to less than significant.

American Badger

No badger dens were observed by biologists during the site visit on May 4, 2023. However, if badgers are present within adjacent open space, any ground disturbing activities (e.g. operation of heavy equipment,

vegetation removal, grading) could result in impacts to American badger dens or mortality of individuals. The impact is considered potentially significant. Implementation of Mitigation Measure BIO-17, in addition to Mitigation Measure BIO-2 (described previously), would reduce the potential impacts to American badger to a less-than-significant level.

Mitigation Measure BIO-17

Within 48 hours prior to any construction activities, the Park District shall have a qualified biologist conduct a survey for badger dens within the project footprint and surrounding 100 feet. If an active den is found, a CDFW-approved non-disturbance buffer shall be established around the den. If the trail alignment cannot be revised to avoid the badger den location, CDFW shall be consulted to determine an appropriate course of action.

Mountain Lion

Mountain lion is a State Candidate species within the Southern California and Central Coast ESU. The study area occurs within the range of this ESU and contains suitable cover, foraging habitat, and movement opportunities for mountain lion. The study area is connected to a larger matrix of chaparral, grassland, riparian, and forested habitats and may be used by mountain lions for hunting and movement. The Biological Resources Technical Report concluded that the study area has moderate potential to function as a wildlife movement corridor and that project activities are not anticipated to alter the ability of the study area to facilitate mountain lion movement and hunting activities.

Mountain lions have been documented within the greater Pleasanton Ridge area, including records of breeding activity. Construction activities could temporarily disturb mountain lions using the area for movement or foraging. In the unlikely event that an active den occurs within or adjacent to the work area, construction activities could disturb denning adults or dependent young. However, the project would not substantially reduce habitat availability, create barriers to wildlife movement, or adversely affect regional habitat connectivity.

Implementation of Mitigation Measures BIO-2, BIO-4, and BIO-6 would reduce impacts to mountain lion to a less-than-significant level. These measures provide worker awareness training, biological monitoring during ground-disturbing activities, and daily pre-construction inspections that would facilitate the identification of mountain lion activity, including any active dens, and allow avoidance measures to be implemented before disturbance occurs.

Crotch's Bumble Bee

Crotch's bumble bee (CBB) has potential to occur within the study area, particularly within grassland habitat, given the presence of suitable underground refugia and foraging resources. Ground disturbing activities (e.g. operation of heavy equipment, vegetation removal, grading) within suitable habitat areas could result in impacts to CBB nests. The potential impact is considered significant. Implementation of Mitigation Measure BIO-18 would reduce the potential impacts to CBB to a less-than-significant level.

Mitigation Measure BIO-18

The Park District shall have a qualified bumble bee biologist survey for Crotch's bumble bee no more than 14 days prior to the commencement of construction activities during the colony active period or the gyne flight season (generally, April 1 to October 31). The survey shall occur at least two hours after sunrise or two hours before sunset (> 60F and < 90F with no rain) and the survey area shall include the project boundaries and a surrounding 100-foot buffer area. The survey duration shall be appropriate to the size of the project site and buffer area based on the metric of a minimum of one person-hour of searching per three acres of suitable habitat.

During the survey(s) the qualified biologists may not capture or handle bumble bees unless specifically authorized to do so by CDFW. At a minimum, survey methods shall include the following:

- Search areas with flowering plants for foraging bumble bees. Observed foraging activity may indicate a nest is nearby, and therefore, the survey duration shall be increased when foraging bees are present.
- Watch any bumble bees present and observe their flight patterns. Attempt to track their movements between foraging areas and the nest.
- Visually look for nest entrances. Observe burrow, any other underground cavities, logs, or other possible nesting habitat.
- Look for concentrated bumble bee activity.
- Listen for humming of nest colony.
- If bumble bees are observed, attempt to identify the species by taking a picture.
- If foraging bumble bees are present and a nest has not been found, floral resources within the project's disturbance footprint may be carefully removed with hand-held tools to minimize foraging bee presence during project activities. The continuation of bumble bee activity once such floral resources are removed may be an indication that a nest is present.
- The biologist conducting the survey shall record when the survey was conducted, a general description of any suitable foraging habitat/floral resources present, a description of observed bumble bee activity, a description of any vegetation removed to facilitate the survey, and their determination of if the survey observations suggest a CBB nest may be present or if construction activities could otherwise harm the species. The survey may be conducted immediately prior to construction granted all the above and below conditions are met.

Nesting Birds and Special-Status Birds

Five special-status bird species may nest within the study area or in the immediate vicinity: Northern harrier, white-tailed kite, golden eagle, loggerhead shrike, and yellow warbler. In addition to special-status nesting birds, common avian species may also nest within the study area and may be similarly affected by project activities. Grading, vegetation removal, and structure removal proposed within the project area may directly impact the nests of protected species or may impact these species indirectly through visual and auditory disturbance sufficient to cause nest abandonment. The potential impact is considered significant. Implementation of Mitigation Measures BIO-19 and BIO-20 would reduce the potential impacts to a less-than-significant level.

Mitigation Measure BIO-19

To the extent practical, the Park District shall avoid conducting project-related activities during the nesting bird season, generally defined as February 1 – August 31. If project work must occur during the nesting bird season, a pre-construction nesting bird survey shall be conducted within 7 days of ground disturbance or vegetation removal to avoid disturbance to active nests, eggs, and/or young of nesting birds. Surveys shall be conducted throughout all potential nesting habitats located within and adjacent to the project area, including staging and storage areas.

If an active nest is located, a no disturbance buffer shall be established around the nest. Active nest sites and protective buffer zones shall be designated as “Environmentally Sensitive Areas” where no project-related activities may occur until a qualified biologist determines that the young have fully fledged, or the nest otherwise becomes inactive (e.g., due to predation), and will no longer be adversely affected by the project. Suggested buffer zone distances differ depending on species, existing conditions, and nest placement and shall be determined and implemented in the field by a qualified biologist. If the nest of a special-status species is discovered, consultation with CDFW may be required.

Mitigation Measure BIO-20

Prior to the start of construction, the Park District shall coordinate with the Golden Eagle Conservation and Monitoring Team (GOEA Monitoring Team), USGS, CDFW, and other appropriate wildlife agencies or databases, as available, to determine whether active golden eagle nests are known to occur within or adjacent to the project area. If a golden eagle nest is observed within the project area or immediate vicinity, during or following construction, the Park District shall notify CDFW and implement Mitigation Measure BIO-19 (described previously). If the nest occurs within a distance that a qualified biologist or CDFW determines could result in the disruption of nesting, restrictions on construction activities and/or seasonal trail closures shall be implemented, as deemed appropriate, to ensure that construction and trail use does not disrupt nesting.

Roosting Bats

Four special-status bat species have potential to occur within the study area: Townsend's big-eared bat, hoary bat, pallid bat, and western red bat. In addition, trees and structures within the study area may support non-special-status bat roosts protected under the CFGC. Tree removal and structure removal associated with the proposed project could result in the direct removal of active bat roosts protected under the CFGC and CEQA. The potential impact is considered significant. Implementation of Mitigation Measures BIO-21 and BIO-22 would reduce the potential impacts to a less-than-significant level.

Mitigation Measure BIO-21

To the extent feasible, the Park District shall have the removal or trimming of any trees with a diameter at breast height (DBH) greater than 16 inches occur outside of the bat maternity season (generally defined as April through September). Irrespective of the time of year, a bat roost assessment shall be conducted by a qualified biologist no more than 30 days prior to the removal or trimming of qualifying trees or the demolition/removal of structures to determine whether suitable bat roost habitat is present. For structures to be removed, such as the two-story winery building, the qualified biologist shall inspect accessible interior and exterior features with potential to support roosting bats, including attics, soffits, gaps beneath roofing materials, wall voids, and other sheltered spaces, prior to demolition activities..

- a. If the tree or structure proposed for removal or modification has no potential to support roosting bats (e.g., no large basal cavities, exfoliating bark, cracks, crevices, attic spaces, interstitial spaces, or other features suitable for bat occupancy), it may be removed or demolished with no further measures required to protect roosting bats.
- b. If a tree or structure contains potential bat roosting habitat and work would occur outside the maternity season, the qualified biologist may either 1) conduct an emergence survey to determine if the roost is occupied; or 2) assume occupancy and implement exclusion or phased removal procedures.

- i. If the emergence survey confirms the roost is inactive, the tree or structure may be felled or removed using standard methods.
- ii. If the roost is confirmed active, or is assumed to be active, the tree or structure shall be removed using methods approved by the qualified biologist that allow bats to vacate prior to complete removal. For trees, a two-phased cut shall be employed to remove the tree. On day one, the qualified biologist shall oversee removal of branches and small limbs not containing potential bat roost habitat using hand tools such as chainsaws or handsaws only. The next day, the rest of the tree may be removed.
- c. If a tree or structure contains potential bat roosting habitat and work would occur during the maternity season, the qualified biologist may either 1) conduct an emergence survey to determine if the roost is occupied; or 2) assume the roost is occupied and establish avoidance measures.
 - i. If the emergence survey does not detect bats, the tree or structure may be removed using standard methods. If roosting bats are detected, or the tree or structure is assumed to be an active roost, a 100-foot buffer, or a buffer determined by the qualified biologist, shall be established and maintained until after the maternity roosting season is complete and the roost is no longer active.

Mitigation Measure BIO-22

The Park District shall have all felled trees remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any day roosting bats to escape.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (Less Than Significant with Mitigation)

Sensitive Natural Communities (SNCs) are habitats and plant communities so designated by the CDFW and listed in the Sensitive in the CNDDDB and on the California Sensitive Natural Communities List. The SNCs are broken down to alliance and association levels for vegetation types affiliated with ecological sections in California. CDFW considers alliances and associations with a state rank of S1 to S3 to be Sensitive.

The following natural communities in the project area are considered sensitive by the CDFW: California Bay Woodland and California Bay - Bigleaf Maple Woodland. Additionally, riparian vegetation within these areas is under the jurisdiction of CDFW per Section 1602 of the CFGC. Coast Live Oak /Poison-oak Woodland is not considered sensitive by CDFW. Project activities may require the removal or trimming of trees associated with sensitive communities to accommodate the proposed trail design and allow for equipment access. Trail construction would result in temporary and permanent impacts to sensitive natural communities including California bay woodland and/or riparian habitats. Permanent impacts would result from the creation of a new, approximately 6-foot wide trail and new and improved stream crossings along the alignment. Temporary impacts would result from temporarily disturbed soils on either side of the trail. Overall, the total acreages of impacts would be relatively minimal and would partially occur along existing ranch roads. Nonetheless, impacts to sensitive natural communities would be considered significant impact. Implementation of Mitigation Measures BIO-23 through BIO-26 would reduce the potential impacts to a less-than-significant level.

Mitigation Measure BIO-23

The Park District shall avoid disturbance to sensitive natural communities to the greatest extent feasible by limiting disturbance to only the areas necessary to complete the project.

Mitigation Measure BIO-24

The Park District shall avoid tree removal to the extent practical. Native or protected trees within the project footprint that are not designated for removal and at risk of being inadvertently impacted as part of the project will be fenced or flagged prior to ground disturbing activities with oversight from a qualified biologist.

Mitigation Measure BIO-25

The Park District shall locate construction staging areas within existing developed areas, to the extent feasible, and will avoid waterways as required under MM BIO-12.

Mitigation Measure BIO-26

The Park District shall restore any areas that are temporarily disturbed by project activities by seeding/revegetating with habitat appropriate, native species that have been documented within the study area.

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

Wetland delineations were conducted by WRA on May 4, and June 1, 2023, to determine the extent of wetlands and other waters within the project area based on hydrophytic vegetation, hydric soils, and wetland hydrology using methods and indicators outlined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region.

The project area supports three sensitive aquatic resources: intermittent stream, ephemeral stream, and iris-leaf rush seeps. These features are within RWQCB and Corps jurisdiction under Section 401 and 404 of the Clean Water Act. Additionally, streams and associated riparian habitat are within CDFW jurisdiction under Section 1602 of the CFGC and RWQCB jurisdiction under the Porter-Cologne Water Quality Control Act. The proposed project has been intentionally sited to avoid iris-leaf rush seeps but may result in impacts to intermittent and ephemeral streams. Permanent impacts may result from the placement of fill associated with the installation and maintenance of articulated block at low-flow crossings.

Temporary impacts to aquatic resources may result from modification to, or maintenance of, existing crossings. In addition, ephemeral streams that occur along the new trail alignment may be temporarily impacted by equipment during trail grading. The installation of clear span bridge crossings is not anticipated to result in permanent impacts to the channel, since the footings will be placed outside of top of bank; however, temporary impacts may occur if BMPs are not implemented.

Based on the preliminary design concepts being considered for each of the four stream crossings, the permanent impact to aquatic features is anticipated to range from 0.0075 to 0.009 acre. Two of the four proposed crossings would not result in adverse impacts to aquatic habitat. At one crossing an approximate -foot dual culvert may be removed and replaced with a structure that is bottomless and allows natural flow, thus removing fill. The small impact anticipated at each crossing would not materially change the aquatic habitat value or hydrologic function of the stream.

Work within aquatic habitats would be restricted to the dry season (June 1 through October 31) when water is not present. In addition, standard construction BMPs would be utilized throughout all work areas where sediment runoff from construction may enter adjacent waters (Mitigation Measure BIO-11) and equipment best practices would be implemented to ensure that accidental discharge does not enter waterways (Mitigation Measure BIO-12). The project would also obtain a Section 404 Permit from the Corps and a Section 401 Water Quality Certification and/or WDR requirements from the RWQCB prior to any impacts to waters of the U.S. and State. In addition, the project would obtain an LSAA from CDFW prior to impacts to creek banks or riparian habitat. All compliance measures included in these permits would be adhered to. The implementation of the Mitigation Measures above will reduce potential impacts to aquatic resources to a less-than-significant level.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Less Than Significant)

Project construction and operations do not include in-water work. Pedestrian crossings installed over aquatic habitats will not result in barriers to dispersal for aquatic species. Grading and vegetation removal associated with the project will be minimal and limited to the proposed trail alignment. Terrestrial project construction and operations do not include construction of any barriers to wildlife migration (e.g., fencing, highly developed roadway, or large structures). A less than significant impact would occur.

The proposed project would not be expected to substantially alter the ability of the study area to facilitate wildlife movement or support nursery sites. The project footprint comprises a very small portion of the expansive open space in the region. The proposed trail would connect to existing trail alignments and would therefore not significantly alter existing land use in the immediate area. Grading and vegetation removal associated with the project would be minimal and limited to the proposed trail alignment. As such, project activities would not significantly alter the vegetative structure of the riparian corridor or impact its ability to provide shelter, cover, and/or breeding habitat for common and special status species discussed herein. In addition, pedestrian crossings installed over aquatic habitats would not result in barriers to dispersal for aquatic species. Based on these factors, the implementation of the proposed project is not anticipated to interfere with the movement of terrestrial or aquatic wildlife. The impact would be less than significant impact.

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

The Union City General Plan, Chapter 8 (Resource Conservation), contains policies pertaining to the following biological resources categories:

- Wetlands, streams, riparian, and aquatic areas (Policies RC-2.3, 2.5, 2.9)
- Open space preservation, enhancement, and protection (Policies RC-1.1-1.10)
- Vegetation communities (Policies RC-2.1, 2.2, 2.4, 2.6, 2.7, 2.8)
- Plant Species (Policies RC-2.1, 2.2, 2.4, 2.6, 2.7, 2.8)
- Wildlife Species (Policies RC-2.1, 2.2, 2.4, 2.6, 2.7, 2.8, 2.10)

The Alameda County Castro Valley General Plan, Chapter 7 (Biological Resources), contains policies pertaining to the following biological resources categories:

- Wildlife and Sensitive Habitats (Policies 7.1-1, 7.1-2, 7.1-3, 7.1-4)
- Creeks and Streams (Policies 7.2-3)
- Vegetation (Policies 7.3-1, 7.3-2)

The project would obtain any legally required permits and would avoid and/or compensate for any impacts to wetlands and waters, and SNCs to ensure that impacts are avoided and mitigated according to the criteria established in this analysis. With implementation of mitigation measures, no conflicts with policies or ordinances protecting biological resources have been identified, and the impact would be less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (No Impact)

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

3.5 Cultural Resources

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

Rincon Consultants prepared an Archaeological Resources Assessment for the project (Rincon 2024a). The assessment evaluated the potential for the project to affect archaeological resources in accordance with CEQA Guidelines Section 15064.5 and included a California Historical Resources Information System (CHRIS) records search, archival and background research, and pedestrian field survey, as well as preparation of resource records and management recommendations. The assessment is incorporated by reference in this IS/MND and retained in a restricted appendix due to the sensitive nature of archaeological resource information.

In addition, Rincon Consultants conducted a Historical Resources Assessment of the project site (Rincon, 2024b). The assessment consisted of background and archival research to inform the historical context of the project area, including property records, historical maps and aerial imagery, historical newspapers, and prior studies. Resources reviewed included materials from the Alameda County Assessor, USGS, as well as relevant registers and databases such as the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), Alameda County Landmarks & Contributing Buildings, and the Built Environment Resources Directory (BERD), and the CHRIS. Additional context was provided through prior site-specific studies and interviews. The assessment also included a pedestrian field survey and visual inspection of the buildings and structures within the project site.

Environmental Setting

Cultural Setting

The project area is located within the traditional territory of the Chochenyo-Ohlone speaking people, whose ancestral lands encompass a portion of the eastern San Francisco Bay Area, and include present-day Alameda County. Ethnographic literature indicates that Ohlone societies were organized in small, autonomous village groups that practiced seasonal mobility and relied on a diverse subsistence base supported in part through active landscape management, including the use of fire to enhance plant and animal resources. These communities maintained complex social and cultural systems with strong ties to the natural environment and regional resource networks.

Beginning in the sixteenth century, European exploration and subsequent Spanish missionization introduced substantial disruption to Indigenous lifeways, resulting in significant demographic, cultural, and economic changes. Subsequent periods under Mexican and American governance further altered land use patterns and contributed to the displacement and marginalization of Native communities. Despite these impacts, Ohlone descendants have maintained cultural connections to the region and continue to be represented today by California Native American Tribes recognized by the Native American Heritage Commission. Additional

information regarding tribal cultural resources is provided in Section 3.18, Tribal Cultural Resources, of this IS/MND.

Regional Historical Context

The property at 33853 Palomares Road in Castro Valley is located within the former Washington Township of Alameda County, which developed during the late nineteenth century as a predominantly agricultural region characterized by grain cultivation, orchards, and livestock operations. Palomares Canyon and surrounding uplands supported dispersed rural uses, including sheep ranching, dairy, and poultry operations, with properties ranging from small farms to large ranch holdings. Growth in the early twentieth century remained gradual but was facilitated by improved transportation access, including the development of the Lincoln Highway and later regional roadway networks. Following World War II, increased population growth and suburbanization, along with construction of major freeways such as Interstate 880 and Interstate 580, transformed the broader Castro Valley area from a rural agricultural landscape to more intensive suburban development.

Property History

Historical mapping indicates that the project area was part of a large landholding owned by railroad industrialist Charles A. McLaughlin in the late nineteenth century. By the early twentieth century, portions of this land were acquired and incorporated into the expanding Cook Ranch, a sheep ranching operation established by Charles and Annie Cook. Over time, the subject property became part of this broader ranching landscape as agricultural uses in Palomares Canyon evolved through successive ownership and land consolidation.

Cook Family Ranch (1910 to ca. 1950s)

The Chouinard property is associated with the Cook family ranching operations that developed in Palomares Canyon during the early twentieth century. Beginning in 1910, the Cook family expanded their holdings from a modest parcel to a large sheep ranch encompassing several thousand acres, including the project site. Ranch-related improvements in the vicinity included residential structures and agricultural support buildings, such as a barn near the project site that was present by the early twentieth century and documented in aerial imagery by 1939. Ranching activities persisted through the mid-twentieth century, supported in part by wartime demand, but declined following World War II, leading to gradual sale and lease of the property. Subsequent ownership changes in the latter half of the twentieth century reflect the broader transition of the area from agricultural use to other land uses.

Chouinard Vineyards & Winery (1977-2022)

The Chouinard property was later incorporated into Chouinard Vineyards & Winery, established in 1977 on former ranch lands associated with the Cook property. The site was adapted for viticultural use, including conversion of an existing barn for winery operations and expansion of vineyard plantings over time. The winery grew in production through the late twentieth century and remained in operation until 2022. This period reflects a broader transition in local land use from traditional ranching to smaller-scale agricultural and commercial uses, followed by eventual public acquisition and cessation of vineyard operations in the early twenty-first century.

Owens Ranch Complex

The Owens Ranch Complex was a historic-period ranch complex located along Sunol Ridge within Pleasanton Ridge Regional Park. The resource historically included a circa 1918 vernacular farmhouse, a circa 1940 work shed, a circa 1900 barn (later collapsed and demolished), two wells, and a small historic

refuse concentration associated with the wells. Based on archival research and field survey, the former complex was recommended as not eligible for listing in the CRHR and NRHP (Evans and DeShazo, 2015).

Existing Conditions (Built Environment)

Property Description

The Chouinard property at 33853 Palomares Road is an approximately 10-acre parcel situated in unincorporated Alameda County and contains a small cluster of built features associated with its past agricultural and winery uses. The site contains four buildings, including a circa 1939 two-story barn later converted to winery use, two one-story wood-frame storage buildings (circa 1987–1993), and a modern prefabricated storage building dating to the 1990s or later. The site is accessed by a gravel driveway and is characterized by a dispersed layout, with the barn located toward the rear of the property and the ancillary structures located near the site entrance.

Converted Barn

The primary feature on the site is a two-story barn exhibiting a monitor roof form and clad in board-and-batten wood siding, set on a concrete foundation. Originally constructed circa 1939, the barn has been substantially altered to accommodate its later use as a winery, including installation of modern doors, windows, and exterior features such as stairs, decks, and awnings. Additional modifications include photovoltaic panels and other non-historic elements. While the overall form of the barn remains intact, these alterations have modified its original appearance and functionality.

Ancillary Building 1

Ancillary Building 1 is a one-story wood-frame structure with a concrete foundation, rectangular footprint, and end-gabled roof. Finished with corrugated metal siding and plywood, the building is located near the site entrance southeast of the barn and appears to have been used for climate-controlled storage, with modified openings and mechanical equipment on the east side and two bay doors on the west side.

Ancillary Building 2

Ancillary Building 2 is a one-story storage structure located northwest of the barn, with plywood walls and doors on a concrete slab foundation and a side-gabled roof with asphalt shingles. The east façade includes three lattice panels.

Ancillary Building 3

Ancillary Building 3 is a one-story prefabricated storage structure with a rectangular footprint, located along the southern edge of the site southwest of the barn. The building is set on metal rails and features a metal exterior with a single-entry door and mechanical equipment.

Owens Ranch Complex

The buildings, structures, and wells formerly comprising the Owens Ranch Complex have been removed, and the resource is no longer extant.

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

The project would involve removal of the existing buildings at the Chouinard Property at 33853 Palomares Road, including the barn and associated ancillary structures. The property has been evaluated and determined to be ineligible for listing in the NRHP, CRHR, and the Alameda County Register under all

applicable criteria. The built features on the property do not meet, either as a district or individually, the thresholds for significance under Criteria A/1/1a (Events), B/2/1b (Persons), C/3/1c–e (Architecture), or D/4 (Information), and the property lacks sufficient integrity to convey historical significance (Rincon 2024). Because the property and individual buildings are not considered a historical resource under CEQA (Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5), demolition of the buildings would not result in a substantial adverse change in the significance of a historical resource. In addition, the Owens Ranch Complex previously located within the project vicinity was also recommended as not eligible for listing in the CRHR or NRHP (Evans and De Shazo 2015). The buildings, structures, and wells formerly comprising the Owens Ranch Complex have been removed and are no longer extant. In addition, the project would avoid the location of the former resource. Therefore, no impact to historical resources would result.

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

The Archaeological Resources Assessment prepared for the project (Rincon Consultants 2024a) identified several previously recorded and newly recorded archaeological resources within or adjacent to the project area. The proposed project has been designed to avoid all identified archaeological resources, and no direct impacts to known resources would occur. Therefore, the project would not result in a substantial adverse change in the significance of known archaeological resources pursuant to CEQA Guidelines Section 15064.5.

However, the proposed project would include ground-disturbing activities, including excavation, and it is possible that previously unidentified archaeological resources could be encountered during construction. If such resources are discovered and determined to qualify as a historical resource under CEQA Guidelines Section 15064.5, or a unique archaeological resource as defined in Public Resources Code Section 21083.2(g), project-related impacts could be potentially significant.

Implementation of Mitigation Measure CUL-1 would reduce the potential impact to a less-than-significant level by outlining procedures to be taken in the event of inadvertent discovery of unrecorded resources consistent with appropriate laws and requirements.

Mitigation Measure CUL-1

If cultural resources are encountered during project-related construction activities, work within a 100-foot of the find shall be halted and the Park District shall retain an archaeologist who either meets, or is supervised by someone who meets, the Secretary of the Interior Professional Qualification Standards for Archaeology immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work may be warranted, such as data recovery, to avoid any adverse effects to archaeological resources.

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

No information has been identified suggesting the presence of human remains within the project area. However, ground disturbing activities associated with the proposed project have the potential to disturb previously unidentified human remains. If such resources were encountered, a potentially significant impact

could result. Implementation of Mitigation Measure CUL-2 would reduce the potential impact to previously undiscovered human remains to a less-than-significant level by outlining procedures to be taken in the event of inadvertent discovery consistent with appropriate laws and requirements.

Mitigation Measure CUL-2

In the event that human remains are discovered during project-related activities, the Park District shall halt all work in that area, and a 100-foot buffer, and shall contact the Alameda County Coroner pursuant to California Public Resources Code Sections 5097.94, 5097.98, and 5097.99. If the county coroner determines the remains to be Native American human remains, the county coroner shall contact the Native American heritage Commission (NAHC). The NAHC will immediately notify those persons it believes to be the most likely descended from the deceased. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods.

3.6 Energy Resources

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

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

Project construction activity would require the temporary use of fossil fuels (gas, diesel, and motor oil) for use of construction vehicles. Construction would not require a comparatively large amount of fuel or energy usage, and would not encourage activities that would use fuel and energy in a wasteful manner. The construction-related impact would be less than significant.

Following construction, operational energy demand would be minimal (primarily visitor vehicle trips and routine maintenance). The project does not include energy-intensive facilities, and would not use large amounts of energy nor use it in a wasteful manner. The operational impact would be less than significant.

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

Project construction activity would not require a large amount of fuel or energy usage because of the limited extent and nature of the proposed improvements. Additionally, the project does not include new building development or energy-demanding infrastructure and would not result in a substantial increase in energy use. No conflicts with a State or local plan for renewable energy or energy efficiency have been identified. No impact would result.

3.7 Geology and Soils

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

Environmental Setting

A Preliminary Geotechnical Report was prepared for the project to identify the existing geological conditions and make recommendations for the proposed project (Crawford & Associates 2024). This section summarizes the report's findings and also references other sources. The project site lies within the Coast Ranges Geomorphic Province of California, characterized by a series of northwest trending mountain ranges and valleys sub-parallel to the San Andres Fault. The Coast Ranges is composed of thick Mesozoic and Cenozoic sedimentary strata. Published geologic mapping shows surface materials in the project area to consist of the marine sandstone and shale of the Cretaceous-age Berryessa Formation (Kp).

a.i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (No Impact)

The project site is not located within an Alquist-Priolo Earthquake Fault Zone, and no known active faults cross the site. A review of the most recent Alquist-Priolo Earthquake Fault Zoning Maps published by the California Geological Survey indicates that the nearest active faults are the Hayward Fault located to the west and the Calaveras Fault located to the east, both of which are outside the project site boundaries (DOC 2026). Additionally, the project does not propose structures for human occupancy. No impact would result.

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

The proposed project is located in the San Francisco Bay Area, which is an area subject to strong seismic ground shaking due to the presence of several active regional faults. Project components include recreational trails, water crossings, a small staging area with limited parking, a pedestrian crossing, and associated park amenities. Minor structures and improvements would be designed and constructed in accordance with applicable building codes, which incorporate seismic design standards intended to reduce risks associated with strong ground shaking. The project does not propose structures for human occupancy. As summarized in Section 1.10, the project would be designed and constructed in conformance with site-specific recommendations contained in the geotechnical investigation completed for the project, which includes seismic design parameters. Therefore, although strong seismic ground shaking is a potential hazard in the region, the project would not result in substantial adverse effects related to seismic shaking. The impact would be less than significant.

a.iii) Seismic related ground failure, including liquefaction? (Less than Significant Impact)

The project site is not located within a mapped Seismic Hazard Zone for liquefaction as delineated by the California Geological Survey and the potential for soil liquefaction at the site is considered to be low (Crawford & Associates 2024). Project components are limited to recreational trails, water crossings, a small staging area with limited parking, a pedestrian crossing, and associated minor park amenities. No deep foundations, underground utilities, or structures requiring special liquefaction or soil measures are proposed. As summarized in Section 1.10, the project would be designed and constructed in conformance with site-specific recommendations contained in the geotechnical investigation completed for the project. The impact related to seismic-related ground failure, including liquefaction, would be less than significant.

a.iv) Landslides? (Less than Significant Impact)

Earthquake-induced landslides can occur in areas with steep slopes, unstable soils, or adverse geologic conditions when subjected to strong ground shaking. The California Geological Survey has mapped known past landslide areas within portions of the broader project vicinity. No landslides are mapped along the proposed Chouinard trail alignment, however, two landslides (debris flows) have been mapped approximately 70 to 125 feet north (and upslope) of the Stonybrook trail alignment between the Stonybrook at-grade creek crossing and its intersection with the Chouinard trail alignment (Crawford & Associates 2024). In addition, the Berryessa Formation within the site vicinity is considered to have moderate relative susceptibility to debris flows (Crawford & Associates 2024).

The project does not include structures for human occupancy, and would not involve extensive grading, deep excavations, or large-scale cut-and-fill operations that could destabilize slopes or activate existing landslide conditions. Trail design would generally follow existing topography and would incorporate standard erosion control and slope protection measures. These measures would minimize alterations to slope geometry and drainage conditions that could contribute to landslide risk. As summarized in Section 1.10, the project would be designed and constructed in conformance with site-specific recommendations contained in the geotechnical investigation completed for the project. The project would not substantially increase landslide susceptibility, and would not expose people or structures to a significant additional risk of landslide-related loss, injury, or death. The impact would be less than significant.

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

Project construction would involve localized re-grading and surface disturbance, primarily related to trail construction and minor site improvements. These activities are typical of park and trail projects and would occur over a limited area. Trail construction would be designed to follow existing topography and would incorporate standard erosion control, drainage features, and surface stabilization to manage runoff and minimize erosion. These measures are commonly used in recreation trail projects and are intended to maintain long-term trail stability while reducing soil loss during storm events. As summarized in Section 1.10, construction activities would be subject to preparation and implementation of a SWPPP. The SWPPP would include additional BMPs and monitoring to minimize disturbed area exposure and prevent off-site sediment transport during storm events. The construction related impact would be less than significant.

Long-term project operation would not involve ongoing ground disturbance that would result in persistent erosion or topsoil loss. In addition, the project would reduce overall impervious surface area compared to existing conditions, reducing runoff velocities that could contribute to erosion. The operational impact would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on, or off, site landslide, lateral spreading, subsidence, liquefaction or collapse? (Less than Significant Impact)

Subsurface conditions identified in the preliminary geotechnical report consist of near-surface soils underlain by weathered bedrock materials. The upper soil unit is composed of clayey and sandy soils with varying gravel content, extending from the ground surface to shallow to moderate depths along the alignment. These materials are underlain by intensely to moderately weathered claystone, which was encountered at depths of approximately 3 to 9 feet below ground surface and extends to the maximum depths explored (Crawford & Associates 2024).

The project consists of recreational trails, a small staging area with limited parking, a pedestrian crossing, and associated minor park amenities. It would not involve large-scale grading, deep excavations, extensive cut-and-fill operations, or alterations to groundwater conditions that could destabilize soils or geologic units. Trail construction would generally follow existing topography and would incorporate drainage and erosion control design features to avoid concentrating runoff or saturating soils. Although seismic-related ground failure could occur regionally during a major earthquake, the project would not substantially increase instability of geologic units or soils, nor would it expose people or structures to a significant additional risk of on- or off-site ground failure. As summarized in Section 1.10, the project would be designed and constructed in conformance with site-specific recommendations contained in the geotechnical investigation

completed for the project. Therefore, the potential impact related to unstable soils would be less than significant.

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

Project components are limited to recreational trails, a small staging area with limited parking, a pedestrian crossing, and other minor park amenities. These improvements do not rely on building foundations or structural systems that would be sensitive to expansive soil behavior. Minor structures or fixtures would be designed and constructed in compliance with applicable building and engineering standards, including provisions of the California Building Code that address soil conditions, as applicable. Compliance with these standards is intended to reduce potential risks associated with soil expansion. The impact would be less than significant.

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

The project would not rely on septic tanks or alternative subsurface wastewater disposal systems. The project would decommission the existing on-site leach field, which previously served winery-related uses. Wastewater service for park visitors would be provided by a vaulted modular restroom building, which does not require a leach field, septic system, or subsurface wastewater disposal. No new septic tanks, leach fields, or alternative wastewater treatment systems are proposed. No impact would result.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less than Significant Impact)

The project site is underlain by undivided Cretaceous sedimentary and metasedimentary rocks consisting of sandstone, shale, and conglomerate, which are generally considered to have low paleontological sensitivity. Additionally, project construction activities would be limited to shallow, localized ground disturbance associated with trail construction, a small staging area, and minor site improvements. In accordance with California Public Resources Code Section 5097.5 and the CEQA Guidelines, if previously unknown paleontological resources are discovered during construction, ground-disturbing activities within the vicinity of the find would cease until the find is evaluated by a qualified paleontologist and appropriate measures are implemented. The impact would be less than significant.

3.8 Greenhouse Gas Emissions

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

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

Construction

The Bay Area Air District Air Quality CEQA Guidelines do not include screening criteria or significance thresholds for construction-related greenhouse gas (GHG) emissions, and there is no applicable federal, State, or local threshold pertaining to construction-related GHG emissions. Construction activities that would result in project-related GHG emissions include exhaust emissions from haul trucks, worker commute vehicles, and construction equipment. Utilizing CalEEMod, it is estimated that the project would generate approximately 117 metric tons of CO₂ during construction of the project. This level of emissions is considered negligible because construction activities would be temporary and short-term (approximately four months), after which no ongoing construction-related emissions would occur. In addition, the total construction emissions represent a one-time contribution that is minor relative to regional GHG emission inventories and would not meaningfully affect the State's long-term GHG reduction trajectory. Construction-related emissions would not be a considerable contribution to the cumulative GHG impact, given the short duration of construction. Therefore, project-related GHG emissions during construction would be considered less than significant.

Operation

Following construction, the project involves low-intensity recreational use within existing parklands, with minimal ongoing vehicle trips and no energy-intensive facilities. The proposed project would not generate substantial GHG emissions or result in substantial new vehicle trips that would contribute to an increase in GHG emissions. Therefore, operational GHG emissions would be minimal, and the impact would be less than significant.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gasses? (Less than Significant Impact)

California Air Resource Board's 2022 Climate Change Scoping Plan for Achieving Carbon Neutrality (CARB 2022) identifies a statewide pathway to reduce GHG emissions. The 2022 Scoping Plan aims to reduce emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045, emphasizes reducing fossil fuel combustion, encouraging compact and sustainable land use patterns, preserving and enhancing

natural and working lands for carbon sequestration, and minimizing greenhouse gas emissions from transportation and buildings.

The proposed project would involve development of recreational trails, a small staging area, and associated facilities within existing regional parklands, and would not introduce energy-intensive land uses or growth-inducing development. Operational GHG emissions associated with the project would be minimal and limited primarily to low-intensity visitor vehicle trips and routine park maintenance activities. The project would not result in long-term increases in building energy use or vehicle miles traveled beyond levels typical of passive recreational use. The proposed project would not conflict with or impede implementation of the 2022 Climate Change Scoping Plan. The impact would be less than significant.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✓
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✓
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			✓	

a, b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Less Than Significant Impact)

Construction activities would not involve transport, long-term storage, or disposal of hazardous materials that could pose a risk to the public or the environment. Construction activities would involve the use of limited quantities of hazardous materials, such as fuels for construction equipment or paints and coatings for facilities. These materials are commonly used during construction, are not acutely hazardous, and would be used in relatively small quantities. Any hazardous materials would be used in limited quantities typical of short-term construction projects and would be handled in compliance with applicable regulations and standard construction practices, including spill prevention and response procedures. Construction-related upset conditions would be less than significant.

The project would also decommission existing utility facilities, including removal of the building and electrical service associated with former winery operations and decommissioning of an existing wastewater leach field. Demolition and construction would be conducted in compliance with applicable local, state, and

federal regulations, including BAAQMD requirements and Alameda County Environmental Health regulations for the handling and disposal of potentially hazardous building materials. Prior to demolition, building materials would be managed in accordance with applicable regulations to minimize the potential release of asbestos, lead-based paint, or other hazardous substances, if present. Construction activities would also be subject to SWPPP BMPs and BAAQMD dust control measures.

During operation, project activities would be limited to passive recreational use and routine park maintenance. These activities would involve only small quantities of common materials, such as fuels, lubricants, and cleaning products used for maintenance equipment and facilities. These materials do not pose a significant hazard when handled properly and are commonly associated with park operations throughout the region. The potential to create a significant hazard to the public or the environment during project operation would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (No Impact)

There are no existing or proposed schools located within one-quarter mile of the project site. In addition, the project does not include land uses or activities that involve the routine emission, storage, or use of hazardous or acutely hazardous materials. No impact would result.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (No Impact)

The project site is not included on any hazardous materials sites list compiled pursuant to Government Code Section 65962.5, commonly referred to as the Cortese List (CalEPA 2026). A review of available environmental databases indicates that the site is not identified as a hazardous waste site, solid waste disposal site, leaking underground storage tank site, or other contaminated site subject to State or federal cleanup programs. No impact would result.

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

The project site is not located within the influence area of a public airport or private airstrip. In addition, the project site is not located within two miles of a public or public-use airport. No impact would result.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Less than Significant Impact)

The project consists of recreational trails, a small staging area with limited parking, a pedestrian crossing of Palomares Road, and associated park amenities within existing parklands. During construction, work occurring within Palomares Road would be conducted subject to encroachment permits and temporary traffic control measures would be used to maintain emergency access. Construction activities would be temporary and would not result in long-term interference with evacuation routes or emergency response operations.

Operationally, the project would support passive, daytime recreational use and would be managed consistent with established park practices. Emergency access to and through the project area would continue to be provided by existing public roadways. The pedestrian crossing would be designed and constructed in accordance with applicable standards and would not interfere with vehicular access for emergency response. The project would not cause physical barriers, gated access, or circulation changes that would interfere with emergency vehicle movement. The project would not require changes to adopted emergency response or evacuation plans maintained by local or State agencies. The impact would be less than significant.

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

The project site is located within a State Responsibility Area (SRA) as identified by the California Department of Forestry and Fire Protection (CAL FIRE). According to CAL FIRE fire hazard severity mapping for Alameda County, effective April 1, 2024, the project area is within a designated High Fire Hazard Severity Zone (CAL FIRE 2024).

The project consists of recreational trails, a small staging area with limited parking, a pedestrian crossing, and associated park amenities. Construction would follow the Park District's best management practices to minimize fire danger in fire-prone wildlands (e.g., prohibiting work on red flag days, warning the public of fire danger on high fire days, establishing pump truck requirements). No residential development, critical facilities, or permanent occupied structures are proposed. The project would not increase wildfire ignition potential. It does not involve construction of new roads, overhead utilities, or other infrastructure commonly associated with increased wildfire risk. The project would not increase the likelihood or severity of wildfire events, nor would it substantially increase the number of people or structures exposed to wildfire hazards beyond existing baseline conditions. The impact would be less than significant.

3.10 Hydrology and Water Quality

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

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

The project is located within the Stonybrook Creek watershed, a tributary to Alameda Creek within the San Francisco Bay Basin, and is subject to the Water Quality Control Plan for the San Francisco Bay Basin. The designated beneficial uses assigned to Stonybrook Creek and Alameda Creek by the Basin Plan are summarized in Section 1.4, Environmental Setting, and Table 1.1. Stonybrook Creek is not listed as impaired under Clean Water Act Section 303(d). Alameda Creek is identified on the 303(d) list as impaired for Diazinon, Ammonia, Dissolved Oxygen, and Toxicity. A TMDL has been adopted for Diazinon in Alameda Creek to address pesticide-related water quality impacts, while TMDLs for Ammonia, Dissolved Oxygen, and Toxicity have not yet been adopted.

Construction activities associated with the project would include demolition of existing buildings and infrastructure, trail construction and realignment, grading, and construction of stream crossings. These activities have the potential to temporarily affect surface water quality through erosion, sedimentation, and the potential release of construction-related pollutants if not properly controlled. As described in Section

1.10, to address these risks, the project would obtain coverage under the State Water Resources Control Board General Permit for Storm Water Discharges Associated with Construction Activities (General Construction Permit) and prepare and implement a project-specific SWPPP. The SWPPP would identify pollutant sources and specify BMPs to minimize erosion, sediment transport, and non-stormwater discharges, including soil stabilization, sediment controls, dust suppression, proper material storage, and spill prevention measures. The project also incorporates Trail Construction and Modification BMPs as Project Design Features, including contour-aligned trail design, out-sloping and grade reversals to disperse runoff, stabilized stream crossings designed to maintain channel function, and avoidance of pollutant discharge to waterways (see Appendix B). Disturbed areas not part of the finished improvements would be restored and revegetated following construction. Where applicable, site drainage would be designed to promote infiltration and minimize concentrated runoff, consistent with low-impact development principles appropriate for trail and park facilities, such as limiting impervious surfaces and managing runoff at its source.

Groundwater is not expected to be encountered during construction. However, if groundwater is encountered during excavation activities, any required temporary dewatering would be conducted in compliance with applicable permits, regulatory requirements, and BMPs to ensure that sediment, pollutants, or contaminated groundwater do not adversely affect surface water or groundwater quality.

With implementation of the SWPPP, compliance with the General Construction Permit, adherence to Basin Plan requirements, and incorporation of project BMPs and design features, the project would not violate water quality standards or waste discharge requirements, nor would it substantially degrade surface or groundwater quality, including downstream waters subject to 303(d) listings and TMDL requirements. Impacts would therefore be less than significant.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Less than Significant Impact)

The project site is not located within a California Department of Water Resources (DWR) designated groundwater basin or subbasin. Therefore, the project is not situated within an area subject to groundwater basin-specific sustainability management requirements under the Sustainable Groundwater Management Act (SGMA).

The project would not require the use of groundwater. No new wells or groundwater-dependent land uses are proposed. In addition, the project would not substantially interfere with groundwater recharge. The project would involve minimal new impervious surface area, limited primarily to small parking improvements and localized hardened surfaces needed for accessibility and safety. The majority of the project improvements would consist of compacted earthen trails and natural surface treatments that retain infiltration capacity. Impacts related to groundwater supply and recharge would be less than significant.

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

The project would include construction of new and realigned multi-use trails, development of a small staging area with associated parking improvements, installation of retaining walls, and construction or replacement

of several stream crossings within the Stonybrook Creek watershed. The project does not propose channelization, realignment, or permanent diversion of Stonybrook Creek or its tributaries. Stream crossings would be constructed or replaced using designs intended to maintain natural channel form and conveyance capacity, including replacement of existing undersized culverts with bridges or stabilized at-grade crossings. In particular, replacement of existing erosion-prone crossings would reduce the potential for concentrated flows, overtopping, and downstream sedimentation during storm events. Portions of the existing Stonybrook Trail currently located within the active floodplain would be realigned upslope, allowing the former alignment to be decommissioned and restored, which would further reduce erosion and sediment delivery to the creek.

Trail construction and modification would be implemented in accordance with Trail Construction and Modification Best Management Practices, which are incorporated into the project as design features. These BMPs include contour-aligned trails, full-bench construction where feasible, out-sloped trail surfaces, rolling dips and grade reversals to disperse runoff, minimization of trail widths, stabilized stream approaches, and armoring where necessary. These measures are specifically intended to prevent concentration of surface runoff along trail alignments and to minimize erosion and siltation both on- and off-site. Construction activities would also comply with the General Construction Permit and include preparation and implementation of a SWPPP. The SWPPP would require installation and maintenance of erosion and sediment control measures such as silt fencing, fiber rolls, stabilized construction entrances, protection of stockpiles, and timely stabilization and revegetation of disturbed areas.

With implementation of the project's design features, trail BMPs, and SWPPP requirements, the project would not substantially alter drainage patterns in a manner that would result in substantial erosion or siltation on- or off-site. Accordingly, impacts related to drainage patterns, erosion, and sedimentation would be less than significant.

c.ii-iii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Less than Significant Impact)

The overall increase in impervious surface area would be small relative to the size of the project site and surrounding open space, and the project would not introduce large expanses of impermeable cover. The project does not propose channelization, diversion, or substantial modification of Stonybrook Creek or its tributaries that would increase downstream flood risk. Stream crossings would be designed to maintain existing flow paths and conveyance capacity and, in some locations, would replace existing undersized or erosion-prone crossings with improved bridge or stabilized at-grade crossing structures. Trail construction would be implemented in accordance with Trail Construction and Modification BMPs, which are incorporated into the project as design features. With these measures in place, the project would not substantially increase the rate or volume of surface runoff in a manner that would result in flooding on- or off-site. Impacts would therefore be less than significant.

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

A Preliminary Hydrology and Hydraulics Study prepared for the project evaluated the potential effects of project construction on flood flows within Stonybrook Creek and its tributaries (GHD 2025). The study utilized HEC-HMS modeling to estimate peak flows associated with 10-year and 100-year storm events in accordance with Alameda County Flood Control and Water Conservation District guidance, and HEC-RAS

modeling to assess hydraulic conditions along the proposed trail alignments and at stream crossing locations. Results indicate that the proposed Chouinard Trail and Stonybrook Trail realignment would be located outside of the 10-year and 100-year floodplains, except at stream crossing locations. Hydraulic analysis identified shallow, high-velocity flows within tributaries and deeper flood depths with wider inundation at the existing Owen property crossing. Based on these findings, the project would incorporate a mix of crossings that do not alter the creek bottoms (rail car bridge crossing or steel open-bottom arch culvert) and low-water crossings that would use articulated block structures to maintain the existing creek flow lines. These crossing types are intended to accommodate existing flow conditions while maintaining channel conveyance capacity and avoiding substantial alterations to flow patterns. Therefore, the project would not substantially impede or redirect flood flows. The impact would be less than significant.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (No Impact)

The project site is not located within a tsunami inundation zone and is not situated near a large enclosed water body, reservoir, or lake subject to seiche hazards. In addition, based on the Preliminary Hydrology and Hydraulics Study prepared for the project, project components would not substantially impede or redirect flood flows or alter floodplain conveyance. No impact would result.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Less than Significant Impact)

The project is located within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board and is subject to the Water Quality Control Plan for the San Francisco Bay Basin. The Basin Plan establishes beneficial uses, water quality objectives, and implementation programs to protect both surface water and groundwater resources within the region. The designated beneficial uses assigned to Stonybrook Creek and Alameda Creek by the Basin Plan are summarized in Section 1.4, Environmental Setting, and Table 1.

Construction activities have the potential to affect water quality if unmanaged, however, the project would be implemented in compliance with a General Construction Permit and preparation and implementation of a SWPPP. The SWPPP would identify and implement erosion, sediment, and pollution control measures to prevent the discharge of pollutants to waters of the State. In addition, the project incorporates trail construction and modification best management practices as design features, including measures to minimize erosion, maintain natural drainage patterns, stabilize stream crossings, and restore disturbed areas. Through these measures, the project would support implementation of the Basin Plan's water quality objectives and attainment strategies.

The project site is not located within a DWR-designated groundwater basin or subbasin and is not subject to basin-specific sustainability management requirements under the SGMA. Therefore, the project would not conflict with, or obstruct implementation of, any applicable sustainable groundwater management plan.

The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would therefore be less than significant.

3.11 Land Use and Planning

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

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

The project is located within existing regional parklands along Palomares Road, including portions of Garin Regional Park and Pleasanton Ridge Regional Park. The surrounding area is characterized by open space, park uses, and low-density rural development. Project improvements consist of recreational trails, a small park staging area with limited parking, and an enhanced pedestrian crossing of Palomares Road intended to improve safety and connectivity between existing park properties. These improvements would enhance public access and connectivity rather than divide an established community. No impact would result.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (Less than Significant Impact)

The project is located within lands owned and managed by the Park District, including portions of Garin Regional Park and Pleasanton Ridge Regional Park. The project has been planned and designed to be consistent with the Park District's adopted park planning documents, including the Garin and Dry Creek Pioneer Regional Parks Land Use Plan Amendment, which identifies future trail connections, expanded public access, and resource protection goals in this area. The project would implement planned recreational improvements within existing parklands and would not introduce land uses that are inconsistent with these adopted plans. As a regional park district with independent statutory authority, the Park District has discretion over the management of its parklands.

As described in other sections of this Initial Study, the project incorporates design features, BMPs, and regulatory compliance measures, habitat protection measures, and stormwater controls intended to avoid or minimize environmental impacts and support the objectives of applicable environmental protection policies. The project would not conflict with the San Francisco Bay Basin Plan, adopted parkland management policies, or other applicable environmental regulations. The project would not result in a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The impact would be less than significant.

3.12 Mineral Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

a, b) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, or a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (No Impact)

California Department of Conservation Mineral Land Classification studies do not designate the project site as having a known mineral resource, and the Alameda County General Plan and Union City General Plan do not designate the project site as being a locally important mineral resource recovery site. The project would not impact any non-operational quarry sites or State-designated mineral resource sectors. Implementation of the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. No impact would result.

3.13 Noise

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

- a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Less than Significant Impact)**

Construction

Alameda County regulates construction noise through its General Plan Noise Element and County Code, which limit construction activities in unincorporated areas to between 7:00 a.m. and 7:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays and Sundays. The Park District would limit construction activities to these allowable hours. In addition, Mitigation Measure BIO-8 requires construction to cease one half-hour before sunset and prohibits commencement earlier than one half-hour after sunrise.

The project would involve temporary noise-generating activities associated with demolition of existing structures, grading, trail construction, stream crossing installation, paving within the staging area, and operation of construction equipment such as excavators, loaders, trucks, and paving equipment. These activities would temporarily increase ambient noise levels in the project vicinity during construction. Typical maximum noise levels range up to 87 dBA Lmax at 50 feet during the noisiest construction phases. The nearest sensitive noise receptors include rural residences along Palomares Road and park users in the surrounding open space.

Construction-related noise would be temporary and intermittent and would occur only during the County's allowed daytime construction hours. No nighttime construction is proposed. Given the limited duration of construction activities and compliance with allowable daytime construction hours, temporary increases in noise levels would not result in a substantial or prolonged disturbance. The impact would be less than significant.

Operation

Operational noise associated with the project would be minimal. Long-term activities would be limited to passive recreational use of trails, small volumes of visitor vehicle traffic accessing the staging area, and

routine park maintenance. These noise sources are consistent with existing park use patterns in Garin and Pleasanton Ridge Regional Parks and would not represent a substantial increase over existing ambient noise conditions. The project does not include permanent mechanical equipment, amplified sound systems, or other continuous noise sources. Therefore, the proposed project would not expose persons to noise levels in excess of local standards. This impact would be less than significant.

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

Construction

The project would involve temporary construction activities that could generate groundborne vibration, including demolition of existing onsite structures, grading, trail construction, installation of retaining walls, and construction of stream crossings. Equipment such as excavators, loaders, and haul trucks can generate perceptible vibration at short distances. However, these activities would be temporary, localized, and limited to daytime construction periods, and would not involve vibration-intensive equipment such as pile drivers or vibratory rollers. Given the distance between construction activity areas and residences, the limited duration of vibration-generating activities, and the type of equipment proposed, groundborne vibration levels would not be expected to result in damage or significant human annoyance. The construction related impact would be less than significant.

Operation

Operational activities associated with the project are limited to passive recreational use, with small volumes of vehicle traffic accessing the staging area, as well as routine park maintenance. These activities would not generate substantial groundborne vibration. Because no long-term sources of groundborne vibration are proposed, the project would not result in excessive groundborne vibration or noise levels. The operational impact would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (No Impact)

The project site is not located within the influence area of a public airport or private airstrip. In addition, the project site is not located within two miles of a public or public-use airport. The project would not expose people to excessive noise levels resulting from airport or airstrip operations. No impact would result.

3.14 Population and Housing

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

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

Project components are limited to recreational trails, a small staging area with parking, and associated park amenities within existing Park District parklands. The project would not directly or indirectly induce population growth. It does not include land uses that would increase permanent population or employment levels, and does not propose extensions of public utilities or infrastructure that could facilitate or encourage future development. No impact would result.

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

No occupied or vacant housing units would be removed, and no residents would be displaced. The project would not require relocation of residents, businesses, or other land uses, nor would it reduce the availability of housing in the region. No impact would result.

3.15 Public Services

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

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public services? (Less than Significant Impact)**

The project consists of recreational trails, a small staging area with parking, and related park infrastructure within existing Park District parklands. It does not include development that would generate new population growth or substantially increase demand for public services. Fire protection, law enforcement, and emergency medical services are already provided to the area by existing service providers, including local fire districts and the Alameda County Sheriff's Office. The project would not require construction of new fire stations, police facilities, emergency response facilities, schools, libraries, or other governmental service infrastructure, nor would it require physical expansion or modification of existing facilities to maintain acceptable service ratios or response times. The project is not anticipated to substantially increase visitation beyond levels typical of existing regional parks, and emergency access would be maintained through existing roadways and park access points. The impact would be less than significant.

3.16 Recreation

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

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Less than Significant Impact)

The project would be implemented within existing parklands, including Garin Regional Park and Pleasanton Ridge Regional Park, and consists of new and realigned multi-use trails, a small staging area with limited parking, and associated recreational amenities. The project is intended to improve recreational access, connectivity, and user experience within established park facilities. Trail construction and modification would incorporate trail design best management practices, including appropriate trail widths, durable surface treatments, grade control measures, erosion protection, and improved stream crossings, all of which are intended to reduce wear, improve drainage, and minimize maintenance needs. The project would also relocate certain trail segments away from erosion-prone or flood-affected areas and restore decommissioned trail segments, which would reduce ongoing physical impacts to park resources.

The proposed trail alignments, stream crossings, staging area, and parking improvements would provide managed public access and would be designed and constructed to applicable engineering and resource protection standards, including erosion control and drainage measures. The facilities would minimize the potential for trail-related erosion, habitat disturbance, and other resource impacts while accommodating recreational use within designated areas. Although the project would increase access to the area, it would not be expected to substantially cause or accelerate the physical deterioration of environmental resources or result in substantial adverse effects associated with recreational use. The impact would be less than significant.

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

The project consists of the development of recreational facilities, including new trails, trail connections, and associated park amenities. The potential environmental effects associated with construction and operation of the proposed facilities are evaluated throughout this Initial Study/Mitigated Negative Declaration.

The project incorporates trail construction and modification best management practices as design features, including contour-aligned trails, drainage controls, erosion protection measures, stabilized stream approaches, and restoration of decommissioned trail segments. In addition, construction would comply with

applicable regulations, including preparation and implementation of a SWPPP and coverage under the General Construction Permit, which would further minimize environmental impacts.

Long-term operation of the recreational facilities would consist of passive recreational use consistent with existing park activities and Park District management practices and would not introduce new types or intensities of use beyond those existing in the open parklands of Garin and Pleasanton Ridge Regional Parks that would adversely affect the environment. The project's recreational facilities are designed to be compatible with the existing park setting, incorporate resource-protective design features, and comply with applicable environmental regulations.

With implementation of the proposed design features, best management practices, and mitigation measures described in this Initial Study/Mitigated Negative Declaration, the construction and operation of the proposed recreational facilities would not result in significant adverse physical effects on the environment. The impact would be less than significant.

3.17 Transportation

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

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

The project would not conflict with roadway or transit plans. It does not propose roadway widening, new vehicular travel lanes, or changes to roadway classification or traffic capacity on Palomares Road or any other public street. Vehicle access would be limited to the small staging area, and project-related traffic would be minimal and consistent with existing park use patterns.

The project would not generate 100 peak hour trips, which is the general Alameda County Transportation Commission and Alameda Congestion Management Agency threshold for requiring preparation of a traffic impact analysis. Construction activities are anticipated to generate up to approximately 24 daily trips, including up to 12 inbound trips during the a.m. peak hour and 12 outbound trips during the p.m. peak hour. Construction-related trip generation would remain well below 100 peak hour trips. Given this low level of trip generation, construction traffic is not expected to conflict with applicable plans, ordinances, or policies addressing the circulation system.

Following construction, potential increases in traffic during weekday peak hours would be limited by the constrained number of parking spaces at the proposed trailhead. Any incremental traffic would likely occur within the normal daily variation in traffic volumes and would not be distinguishable from existing conditions. While weekend visitation to the trailhead may increase, such trips would likely occur outside of the weekday a.m. and p.m. peak hours used to evaluate roadway performance under applicable standards. Therefore, operational traffic is not expected to conflict with applicable plans, ordinances, or policies addressing the circulation system.

The project would improve trail connectivity between Garin Regional Park and Pleasanton Ridge Regional Park by formalizing access points. The Palomares Road crossing would be designed to improve safety for pedestrians, cyclists, and equestrians and would be implemented in coordination with roadway safety standards. Project work within the public roadway would require an encroachment permit, and the project would comply with applicable roadway design, safety, and operational requirements. A temporary traffic control or traffic management plan would be prepared and implemented to maintain safe circulation for motorists, pedestrians, and cyclists during construction. These measures would ensure that construction activities do not result in hazardous conditions or conflicts with adopted circulation standards or policies.

The project would not conflict with a program plan, ordinance, or policy addressing the circulation system, and impacts would be less than significant.

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

Pursuant to SB 743 and the current CEQA Guidelines, evaluation of a project's potential transportation impact requires consideration of vehicle miles traveled (VMT), which refers to the amount and distance of automobile travel attributable to a project.

The project consists of improvements to an open space park and trail system, which is considered a local-serving recreational use. Screening criteria based on the Governor's Office of Planning and Research Technical Advisory identify similar community-serving uses as projects that can be presumed to have a less-than-significant VMT impact because they primarily serve nearby residents and may reduce the need for longer vehicle trips to more distant recreational facilities. The project does not include residential, commercial, or employment development and would not generate new permanent population, employment, or commute trips. Vehicle trips associated with the project would be limited primarily to recreational visitors accessing the park, which would be intermittent and generally short-term in nature, and limited by the constrained number of parking spaces at the proposed trailhead. The project would not increase roadway capacity or extend transportation infrastructure in a way that would induce additional vehicular travel. Given the project's local-serving nature and limited trip generation, the project would not result in a substantial increase in VMT and would not conflict with transportation impact evaluation standards established under CEQA Guidelines Section 15064.3(b). The impact would be less than significant.

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

The proposed pedestrian and equestrian crossing of Palomares Road would be designed and constructed in accordance with applicable roadway safety standards and would be implemented subject to an encroachment permit from the applicable roadway authority. Crossing design features would be intended to improve visibility, delineate crossing locations, and reduce potential conflicts between vehicles and non-motorized users. The project would not introduce sharp curves, constrained sight distances, or other geometric features that would increase collision risk. During construction, temporary traffic control measures would be implemented as needed to maintain safe conditions for all roadway users. Construction activity would be short-term and would not result in permanent hazardous conditions. Vehicular traffic to the project site would be limited to park visitors. The project would not substantially increase hazards due to geometric design features or incompatible uses. The impact would be less than significant.

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

During construction and operation, emergency access to and within the project area would be maintained via existing public roadways, including Palomares Road. The project does not propose modifications that would block, narrow, or otherwise impede existing roadways or access points used by emergency responders. During construction, contractor access and staging would be managed to ensure that emergency access is not obstructed. If construction activities occur within or adjacent to Palomares Road, work would be conducted under an encroachment permit from the applicable roadway authority, and

temporary traffic control measures would be implemented as needed to maintain safe and adequate access for emergency vehicles. Any temporary lane closures or traffic control would comply with applicable standards and would be coordinated to avoid emergency response conflicts. Operation of the project would consist of passive recreational use typical of regional park facilities. The project would not result in inadequate emergency access. The impact would be less than significant.

3.18 Tribal Cultural Resources

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

Environmental Setting

Cultural Setting

Although this type of classification would have been functionally meaningless to people actually living in pre- and proto-contact times, Western academics have organized Native California peoples based on language classifications (Panich 2020). Predicated on this western academic lens, Native Californians living within the swath of land from San Francisco Bay south to Monterey, the Big Sur Coast and the San Benito River drainage were linguistically similar enough to be grouped together as speaking what has been broadly categorized as the Ohlone language. Academics/linguists have identified six different Ohlone languages: Karkin, Awaswas, Mutsun, Rumsen, Chalon, and San Francisco Bay Costanoan. The San Francisco Bay Costanoan Ohlone language, which as the term suggests, was spoken within the vicinity of the Bay Area, included three different dialects: Ramaytush, Chochenyo, and Tamyen.

The project encompasses portions of the valley between Pleasanton Ridge and Sunol Ridge, a section of Sunol Ridge, Stonybrook Canyon, and a portion of Walpert Ridge. Based on current ethnographic literature, the project is located within Chochenyo Ohlone territory. Chochenyo Ohlone was spoken along the eastern shore of the San Francisco Bay from the Richmond-San Pablo area to Hayward and Fremont and within the interior of Alameda County within the San Ramon and Dublin area and the Livermore Valley (Golla 2011).

Chochenyo Ohlone

Ethnographers (e.g., Kroeber 1925; Broadbent 1972; Levy 1978; Milliken 1995) have been able to piece together a generalized picture of traditional Ohlone culture using oral history, archaeological investigations, and 18th century Spanish letters, diaries, and accounts. Historically, western academics used the term “tribelet” to describe the socio-political organization of pre-contact Native California groups (Panich 2020). It is important to note that the term “tribelet” has fallen out of favor, given the seemingly pejorative nature of the

term. Panich (2020) offers that Native Californian groups within the Bay Area had developed complex, relatively stable social institutions that favored small group size with minimal political hierarchy.

Socio-politically, the Ohlone lived in approximately 50 autonomous villages (or tribes) throughout Bay Area (Levy 1978). Leaders of these tribes could be either men or women, though Levy (1978) indicates the office was inherited along patrilineal lines. Each tribe occupied a permanent primary habitation site, in addition to many smaller resource procurement camps. Each village was probably occupied for several months each year, with groups of families moving between different locations as food resources became seasonally available. Groups of families coalesced during winter, in part to make use of shared food stores but also to engage in annual ceremonial activities (Broadbent 1972; Margolin 1978; Milliken 1995).

The evolutionary trajectory of Ohlone may not have arced toward agriculture, but rather toward subsistence based on landscape management, with emphasis on relationships with specific plant and animal communities. The highly productive environment, described and lauded by European observers, was a result of active Native landscape management. Burning and other practices encouraged a wide variety of plant resources such as nuts, seeds, grasses, fruits, roots, and tubers, as well as the animals that were attracted to them (Panich 2020).

Ethnohistory

The first recorded intrusion into the lives of Indigenous people of what is now the greater Bay Area, occurred in 1542, when Juan Rodriguez Cabrillo anchored in the region that became known as Monterey. Numerous European expeditions followed, by sea and land. These early encounters heralded a time of tremendous dislocation and upheaval in the lives of Indigenous people (East Bay Regional Park District [Park District] 2018). The entry of Spanish missionaries, soldiers, and later civilians introduced a tumultuous time, where extensive socio-cultural and environmental changes made it impossible for Indigenous people to continue their traditional, pre-contact way of life.

Mexico's independence from Spain in 1821, began the process of secularization of mission lands and ushered in another era of change. Although Spanish missionaries had promised to one day return mission lands to local Indigenous, only a tiny number of Ohlone/Costanoan, and no Bay Miwok or Delta Yokut, ever received any land. Instead, they became serf-like laborers on non-Indigenous owned ranchos, with most of the Indigenous labor actually being coerced through the use of force (Park District 2018; Madley 2014). Older boys and men tended to work as vacqueros while older girls and women often worked as housekeepers, cooks, and childcare workers (Park District 2018). The Indigenous people endured another era of change when California became a state in 1850. Ohlone/Costanoan peoples (along with other California Indigenous peoples) were subject to state laws that legalized the indenture and de facto slavery of Indigenous people, leading to their kidnapping, buying, and selling. These laws also made it illegal for Indigenous people to testify in court, serve on juries, and vote. In 1863, the passage of the Emancipation Proclamation began to dismantle these laws; by 1924 California Indians were granted citizenship (Park District 2018).

In 1928, three main Ohlone/Costanoan communities survived, those of Mission San Jose, Mission San Juan Bautista, and Mission Carmel. The 1930s through the 1950s were decades when discrimination against them and all California Indians continued to abound. Milliken et al. (2009) indicate that Indigenous Californians responded to this in four main ways: 1) ignoring it, 2) by keeping a low profile, 3) passing as a member of another ethnic group, or 4) creating familial and community support networks. The 1960s through the 1980s were transitional decades when Ohlone/Costanoan's began to influence public policy in local areas (Milliken et al. 2009). Since the 1970s, many Ohlone/Costanoans have participated in intertribal pan-Indian events (gatherings, picnics, meetings, pow-wows) that have helped to foster renewed pride in their Indigenous heritage. Ohlone/Costanoan peoples have continued to speak and revive their native languages, and for

many Ohlone/Costanoan individuals and groups, no events are more important than gatherings (Milliken et al. 2009).

Chochenyo Ohlone Today

The East Bay Ohlone remain strong, determined, resilient, and connected to their ancestral land. They are politically represented by a number of tribes, who have identified themselves to the Native American Heritage Commission. Members of these tribes have maintained connection to their culture through their family relationships, and practice of cultural traditions. They maintain and renew their cultural identity through programmatic efforts (e.g., language programs), social/family gatherings and internal governmental meetings, or for some, through efforts to have their interests recognized by local representatives of federal, state, or county governments, and special districts (Milliken et al. 2009).

Assembly Bill 52 Consultation

Assembly Bill (AB) 52 of 2014 amended PRC Section 5097.94 and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 established that TCRs must be considered under the CEQA and also provided for additional Native American consultation requirements for the lead agency. PRC Section 21074 describes a TCR as a site, feature, place, cultural landscape, sacred place, or object that is considered of cultural value to a California Native American Tribe and that is either:

- On or determined to be eligible for the California Register of Historical Resources or a local historic register; or
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

AB 52 formalizes the lead agency–tribal consultation process. Specifically, it requires the lead agency to notify a California Native American tribe of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe if that tribe has requested such notification, in writing, to the lead agency (PRC Section 21080.3.1[b]). Additionally, prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report, the lead agency is required to begin consultation with a California Native American tribe that requested consultation within 30 days of receipt of project notification (PRC Section 21080.3.1[e]). PRC Section 21084.2 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment.”

Effects on TCRs should be considered under CEQA. PRC Section 21080.3.2 states that parties may propose mitigation measures “capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to a tribal cultural resource.” Further, if a California Native American tribe requests consultation regarding project alternatives, mitigation measures, or significant effects to tribal cultural resources, the consultation shall include those topics (PRC Section 21080.3.2[a]). The environmental document and the mitigation monitoring and reporting program (where applicable) shall include any mitigation measures that are adopted (PRC Section 21082.3[a]).

The Park District contacted the Native American Heritage Commission (NAHC) on May 9, 2025, to request the Assembly Bill (AB) 52 Tribal Consultation list and for a search of the Sacred Lands File (SLF) for the project. The NAHC responded to Park District’s request on May 13, 2025. The SLF search was negative. The Park District distributed letters to the tribes/individuals on the Tribal Consultation list via electronic mail (email) and certified mail on July 21, 2025. The Park District’s letters included a description of the project, its location, and requested a response to engage in consultation pursuant to AB 52 within 30 days (by August 20, 2025). On August 11, 2025, Park District Planning staff placed follow-up phone calls to the tribes that failed to

respond halfway through (August 5, 2025) the 30-day circulation period (see Table 3). Out of the individuals/tribes contacted, two California Native American tribes (the Confederated Villages of Lisjan Nation and the Costanoan Rumsen Carmel Tribe) requested AB52 consultation (see Table 4).

No TCRs were identified as a result of AB52 consultation. All NAHC correspondence and government consultation documents are on file with the Park District.

Table 3 Correspondence Efforts with Native American Tribes that did not Result in Assembly Bill 52 Consultation

Tribe Name	Contact Person	Responded On
Amah Mutsun Tribal Band	Ed Ketchum, Vice-Chairperson	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
Amah Mutsun Tribal Band	Valentin Lopez, Chairperson	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
Amah Mutsun Tribal Band of Mission San Juan Bautista	Christopher Zimmer, Senior Cultural Monitor & Consultant, Councilman	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
Amah Mutsun Tribal Band of Mission San Juan Bautista	Garry Zimmer, Senior Cultural Monitor & Consultant	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
Amah Mutsun Tribal Band of Mission San Juan Bautista	Michelle Zimmer, Senior Cultural Monitor & Consultant	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
Amah Mutsun Tribal Band of Mission San Juan Bautista	Shelby Brown, Senior Cultural Monitor & Consultant, Councilwoman	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
Amah Mutsun Tribal Band of Mission San Juan Bautista	Irenne Zwierlein, Chairperson	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
Indian Canyon Mutsun Band of Costanoan	Ann Marie Sayers, Chairperson	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
Indian Canyon Mutsun Band of Costanoan	Kanyon Sayers-Roods, MLD Contact	Park District staff placed a follow-up call on August 11, 2025, and there was no answer. A voicemail message could not be left because the mailbox was full.
Muwekma Ohlone Tribe of the SF Bay Area	Richard Massiatt, Councilmember/MLD Tribal Rep.	See response from Chairperson Nijmeh.
Muwekma Ohlone Tribe of the SF Bay Area	Charlene Nijmeh, Chairperson	Senior Tribal Archaeologist and Bioarchaeologist Marni McManus responded on behalf of the tribe and Chairperson Nijmeh indicating that the tribe was available to assist with their services, if needed, but did not request Assembly Bill 52 consultation. The Park District responded on August 1, 2025 stating that the Park District would reach out if the tribe's assistance was needed. The tribe did not provide any additional responses/correspondence.
Northern Valley Yokut / Ohlone Tribe	Katherine Perez, Chairperson	called on August 11, 2025, and there was no answer. A voicemail message was left regarding the project. There was no follow-up response from the tribe.
Northern Valley Yokut / Ohlone Tribe	Timothy Perez, Tribal Compliance Officer	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.
The Ohlone Indian Tribe	Andrew Galvan, Chairperson	Mr. Galvan responded on behalf of The Ohlone Indian Tribe on July 22, 2025 requesting the NAHC response letter and contact list. Park District staff responded on the same day, via electronic mail, providing the requested information. Mr. Galvan did not request any

Tribe Name	Contact Person	Responded On
		additional information and he did not request Assembly Bill 52 consultation.
The Ohlone Indian Tribe	Vincent Medina, Cultural Leader	see response from Mr. Galvan on July 22, 2025.
The Ohlone Indian Tribe	Desiree Vigil, THPO	see response from Mr. Galvan on July 22, 2025.
Wilton Rancheria	Cultural Preservation Department	A follow-up phone call was placed to the tribe on August 11, 2025. Wilton Rancheria Cultural Preservation Department staff indicated that the Project is out of their focus area and that they did not wish to consult.
Wilton Rancheria	Michelle St. Clair, Executive Director of Cultural Preservation	See response from Wilton Rancheria's Cultural Preservation Department.
Wilton Rancheria	Steven Hutchason, Tribal Historic Preservation Officer	See response from Wilton Rancheria's Cultural Preservation Department.
Wuksachi Indian Tribe/Eshom Valley Band	Kenneth Woodrow, Chairperson	Park District staff placed a follow-up call on August 11, 2025, and there was no answer.

Table 4 Assembly Bill 52 Consultation

Tribe Name	Contact Person	Responded On
Confederated Villages of Lisjan Nation	Corrina Gould, Chairperson Cheyenne Gould, Tribal Cultural Resource Manager Deja Gould, Language Program Manager	On July 22, 2025 Stacey Nieves, Tribal Administrative Assistant, responded on behalf of the tribe requesting Assembly Bill 52 consultation. The tribe also requested copies of the Sacred Lands File results, the California Historical Resources Information System records search, and any cultural resources reports prepared for the project, and any specific information on proposed ground disturbance. The Park District responded with this information on August 1, 2025. The Park District consulted (virtually) with the tribe on August 20, 2025. At the conclusion of the meeting, the tribe indicated they would discuss the project internally and follow-up with concerns around Tribal Cultural Resources. Following the meeting, on August 20, 2025, Park District staff followed up by email with additional information regarding an archaeological resource. The Park District offered follow-up meetings to discuss any concerns regarding TCRs. The tribe did not respond to the Park District's follow-up email. No TCRs were identified.
Costanoan Rumsen Carmel Tribe	Samuel Rodriguez, Cultural Resource Officer Henry Muñoz, Cultural Resource Officer Carla Munoz, Tribal Council	A follow-up phone call was placed to Cultural Resource Officer Samuel Rodriguez on August 11, 2025. Mr. Rodriguez responded on behalf of the Costanoan Rumsen Carmel Tribe confirming that the tribe would like to engage in AB52 consultation. The Park District responded on August 13, 2025, confirming receipt of and thanking Mr. Rodriguez for his response. The Park District provided multiple days/times for meetings. The tribe failed to respond and the Park District followed up on September 4, 2025 with additional days/times for consultation. The tribe responded on September 6, 2025 indicating that they would be available on September 16, 2025. The Park District met virtually with Mr. Rodriguez at 3:30pm on September 16, 2025.

Tribe Name	Contact Person	Responded On
		At the conclusion of the meeting, Mr. Rodriguez agreed that the tribe would respond in 30-days (by October 16, 2025) with any concerns about Tribal Cultural Resources (TCRs) in the project area. The tribe failed to respond by October 16, 2025. On November 11, 2025, Park District staff transmitted a letter, via electronic mail only, to Mr. Rodriguez and Mr. Munoz stating that since the tribe failed to follow-up with the Park District by October 16, 2025 and did not identify any TCRs, the Park District concluded AB52 consultation with the tribe.

a.i) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k)? (Less than Significant with Mitigation)

No TCRs that are listed in, or eligible for listing in, the California Register of Historical Resources were identified within the project area, either as a result of the background research conducted for this project or as a result of the study that was conducted for this project. However, the possibility still remains that the project could impact an as-yet to be identified TCR during project implementation. Disturbance of a TCR, if present, during project implementation could potentially result in a significant impact. Implementation of Mitigation Measures TCR-1, TCR-2, and TCR-3 would reduce the potential to directly or indirectly cause a substantial adverse change in the significance of a TCR to a less-than-significant level.

Mitigation Measure TCR-1

The Park District shall retain a representative from an East Bay Area Ohlone tribe, to provide a tribal cultural resources awareness training prior to the start of the project, and on an as-needed basis (e.g., when new construction personnel arrive on-site).

Mitigation Measure TCR-2

The Park District shall retain a tribal monitor from an East Bay Area Ohlone tribe to be present during project-related, ground-disturbing activities. The Park District, in consultation with the tribal monitor and/or the East Bay Ohlone tribe the tribal monitor is affiliated with, will develop a monitoring plan that will outline the roles and responsibilities of the tribal monitor, and the procedures that will be followed in the event a TCR is identified during project-related construction.

Mitigation Measure TCR-3

In the event that human remains are inadvertently encountered during construction activities, the Park District shall have the remains and associated funerary objects treated in accordance with state and local regulations that provide requirements with regard to the accidental discovery of human remains, including California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and CEQA Guidelines Section 15064.5(e). In accordance with these regulations, if human remains are found, the County Coroner must be immediately notified of the discovery. No further excavation or disturbance of the project site or any nearby (no less than 100 feet) area reasonably suspected to overlie adjacent remains can occur until the County Coroner has determined if the remains are potentially human in origin. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to immediately notify the Native American Heritage Commission (NAHC). The NAHC will notify the person/s it believes to

be the most likely descendant (MLD) from the deceased individual. The MLD must then complete their inspection and determine, in consultation with the property owner, the treatment and potential disposition of the human remains.

- a.ii) Cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe. (Less than Significant with Mitigation)**

As noted above, to date, no TCRs have been identified as a result of the study, or from the AB52 consultation, for this project. However, if a TCR is identified as a result of project-related activities, the impact would be reduced to less than significant with the implementation of Mitigation Measure TCR-1, TCR-2, and TCR-3, described above.

3.19 Utilities and Service Systems

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

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

Water Supply. The project site contains an existing groundwater well that currently serves the on-site residence and formerly served a winery tasting room. The project would retain and maintain the existing well for domestic use associated with the existing residence and as a water source for fire protection purposes within the site access staging area. Overall water demand would decrease because the tasting room use would be discontinued. No new wells or off-site water supply facilities would be required.

Wastewater. The project would decommission the existing on-site sewer leach field at the trailhead staging area. Wastewater service would be provided by a vaulted modular restroom building, which does not require a leach field or connection to municipal wastewater infrastructure. This change would eliminate subsurface effluent dispersal and would not require construction of new wastewater treatment or conveyance facilities.

Stormwater Drainage. The project would reduce total impervious surface area compared to existing conditions. Stormwater runoff would continue to be conveyed via existing natural drainage patterns, and no new or expanded storm drain infrastructure would be required.

Electrical Power and Telecommunications. Existing electrical service to the site would be partially decommissioned with removal of winery-related facilities. Electrical and telecommunications service would

be retained where needed for the adjacent residence and for the proposed pedestrian crossing. No new power lines or telecommunications lines would be constructed. Any required connections would utilize existing utilities. No lighting is proposed at the staging area, which would be limited to daytime use. A single, downcast light fixture may be added to an existing power pole at the pedestrian crossing for safety purposes, but this would not require new poles, trenching, or utility extensions.

Natural Gas. The project would not require natural gas service, and no new gas infrastructure would be installed.

Overall, the project would result in reduced utility demand relative to existing conditions, would rely on existing infrastructure, and would not require off-site utility construction or expansion of service systems. The changes would reduce overall utility demand compared to existing conditions. The impact would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (Less than Significant Impact)

Water service to the project site is provided by an existing on-site groundwater well, which currently serves the existing residence and formerly served a winery tasting room. The existing well would be retained and maintained to continue serving the existing residence and to provide a water source for fire protection purposes within the site access. The project does not include new water-intensive uses, and overall demand would be reduced compared to previous conditions because the former winery tasting room use would be discontinued. The project would have adequate water supplies. The impact would be less than significant.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (No Impact)

The project would decommission an existing on-site sewer leach field, which was previously used to serve a winery tasting room. The project would install a vaulted modular restroom building to serve park visitors. The vaulted restroom facility would not require a leach field or connection to a wastewater collection or treatment system and does not generate wastewater flows that would be conveyed to or treated by an off-site provider. Therefore, the project would not be served by a public or private wastewater treatment provider, and would not require a determination of wastewater treatment capacity. No impact would result.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (Less Than Significant)

The project would generate limited amounts of solid waste during construction, including debris from demolition of existing structures and trail construction activities. Construction-related waste would be managed in accordance with applicable State and local solid waste regulations, including requirements for recycling, proper disposal, and diversion of construction and demolition debris. Construction waste would be transported to permitted disposal or recycling facilities with adequate capacity to handle the material, and compliance with waste diversion requirements would minimize landfill disposal.

Operation of the project would generate only minimal solid waste associated with routine park use, such as visitor refuse and occasional maintenance debris. These wastes are consistent with existing park operations within Park District facilities and would be handled through established waste collection, recycling, and disposal services already serving the park system. In addition, the project would install wildlife-resistant receptacles to reduce the potential for litter and wildlife attraction. The project would not introduce new land uses or levels of activity that would substantially increase solid waste generation beyond existing conditions. The impact would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (No Impact)

Construction-related solid waste would be managed in accordance with applicable construction and demolition recycling and diversion requirements, including segregation of recyclable materials to the extent feasible and proper disposal of non-recyclable materials. Operational solid waste generated by the project would be minimal and limited to routine refuse associated with park visitors and maintenance activities. Solid waste generated during operation would be collected and disposed of through existing waste management services already used by the Park District. Because the project would comply with applicable solid waste regulations, no impact would result.

3.20 Wildfire

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

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan? (Less than Significant Impact)

The project site is located within a State Responsibility Area (SRA) as identified by the California Department of Forestry and Fire Protection (CAL FIRE). According to CAL FIRE fire hazard severity mapping for Alameda County, effective April 1, 2024, the project area is within a designated High Fire Hazard Severity Zone (CAL FIRE 2024).

The project consists of recreational trails, a small staging area with limited parking, and associated park amenities within existing parklands. The project does not include residential development, critical facilities, or permanent occupied structures that would interfere with emergency evacuation procedures. No road closures, roadway reconfigurations, or circulation changes are proposed that would reduce roadway capacity or obstruct designated emergency access or evacuation routes.

Construction work occurring within Palomares Road would be conducted under an encroachment permit and temporary traffic control measures would be implemented to avoid interference with emergency response. Operationally, the project would consist of passive recreational use typical of regional park facilities and would not generate conditions that require modification of adopted emergency response or evacuation plans. Emergency access to the project area would continue to be provided via existing public roadways, including Palomares Road, as well as internal park access routes used for maintenance and emergency response. The project does not propose gated access, permanent obstructions, or trail alignments that would impede emergency vehicle movement. The project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and impact would be less than significant.

- b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project exacerbate wildfire risks due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (Less than Significant Impact)**

The project area includes steep terrain, wildland vegetation, and environmental conditions that can influence wildfire behavior, including slope and seasonal wind patterns typical of the East Bay hills. While the project is located in a high fire hazard area, it would not introduce land uses or conditions that would exacerbate wildfire risk. The project consists of recreational trails, a small staging area with limited parking, and associated park amenities within existing parklands. The project would not involve substantial grading or landform changes that would increase fire potential on slopes, nor would it alter prevailing wind exposure patterns. The project would be implemented and operated consistent with Park District management practices. The project would not exacerbate wildfire risk or substantially increase exposure beyond existing conditions. The impact would be less than significant.

- c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (Less than Significant Impact)**

The project would not require construction or expansion of new roads, fuel breaks, emergency water supply infrastructure, power lines, gas lines, or telecommunications facilities. Project components are limited to recreational trails, a staging area with limited parking, trail crossings, and related park amenities. Access to the project area would utilize existing public roadways and established park access routes. Routine park maintenance activities, including vegetation management adjacent to trails, would continue under existing Park District operational practices. Because the project does not require new or expanded infrastructure that would exacerbate wildfire risk, it would not substantially increase wildfire hazards. The impact would be less than significant.

- d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes? (Less than Significant Impact)**

The project does not include residential development, permanent structures, or critical facilities that would place people or structures in locations subject to increased post-fire flooding or landslide risk. No habitable structures are proposed, and occupancy would be limited to temporary, passive recreational use.

Project construction would not substantially alter existing drainage patterns, watershed boundaries, or slope stability. Construction activities would be temporary and would comply with applicable erosion and sediment control requirements to prevent short-term increases in runoff or sediment transport. Long-term operation of the project would not alter hydrologic conditions in a manner that would increase downslope or downstream hazards. Trail alignments would be designed to follow contour gradients where feasible and would incorporate standard erosion control and drainage features to maintain existing runoff conditions. The project would not involve large-scale grading, slope cut-and-fill, or vegetation removal that would destabilize

hillsides or increase the risk of landslides or downstream flooding. The project would not increase the likelihood or severity of such hazards, nor would it redirect runoff toward occupied areas or structures.

The project would not expose people or structures to significant risks from downslope or downstream flooding, landslides, post-fire slope instability, or drainage changes. The impact would be less than significant.

3.21 Mandatory Findings of Significance

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

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

Project impacts to biological and cultural resources are addressed in Section 3.4, Biological Resources, Section 3.5, Cultural Resources, and Section 3.18, Tribal Cultural Resources. With implementation of the recommended mitigation measures identified in this Initial Study, the potential for project-related activities to degrade the quality of the environment, including wildlife species or their habitat, plant or animal communities, or important examples of California history or prehistory would be reduced to less-than-significant levels.

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

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

Efforts to identify cumulative projects included contact with the Park District and review of Planning Department web portals. The following reasonably foreseeable cumulative projects were identified and considered:

- **Bay Area Ridge Trail: Garin Regional Park to Niles Canyon** – This project, proposed by the East Bay Regional Park District, would involve construction of approximately five miles of multi-use trail extending from Garin Regional Park to Vallejo Mill Historical Park in Fremont. Improvements include a combination of new trail segments, a trail bridge, multiple water crossings, and an at-grade crossing of the Niles Canyon Railway. Construction is anticipated to begin in late 2026 or early 2027.
- **City of Pleasanton Hidden Canyon Residences and Preserve Project** – This project would involve development of 28 new detached single-family residences and associated roadways on approximately 23.89 acres of an approximately 130.98-acre site in the City of Pleasanton. The project would also include demolition and reconstruction of two existing residences, dedication of open space, annexation of portions of the site into the City of Pleasanton, and inclusion of the existing Oak Hills Congregation Church site to facilitate logical city boundary reorganization.

The project would not result in impacts related to mineral resources or population and housing. Therefore, it would not contribute to any cumulative impacts associated with those resource areas.

The identified cumulative projects have been reviewed in accordance with CEQA by their respective Lead Agencies. The impacts associated with the proposed project analyzed in this IS/MND would not add appreciably to any existing or foreseeable future significant cumulative impact, such as visual quality, cultural resources, biological, traffic impacts, or air quality degradation. Any applicable cumulative impacts to which this project would contribute would be mitigated to a less-than-significant level. Because the proposed project would not result in significant impacts after mitigation, the proposed project would not contribute to any significant cumulative impacts which may occur in the area in the future. Incremental impacts, if any, would be very small, and the cumulative impact would be less than significant.

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

With implementation of the recommended mitigation measures identified in this IS/MND, the potential for project-related activities to cause substantial adverse effects on human beings would be reduced to less-than-significant levels.

4. References

- Alameda County. 2012. Castro Valley General Plan.
- Bay Area Air Quality Management District (BAAQMD). 2017. Final 2017 Clean Air Plan. Adopted April 19, 2017.
- California Department of Conservation (DOC). 2025. Alameda County Important Farmland 2022. Published April 2025.
- California Department of Conservation (DOC). 2026. Williamson Act Enrollment Finder.
<https://maps.conservation.ca.gov/dlrp/WilliamsonAct/>. Accessed: May 2026.
- California Air Resources Board. 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. December 2022.
- California Environmental Protection Agency (CalEPA). 2026. Cortese List Data Resources.
<https://calepa.ca.gov/sitecleanup/corteselist/>. Accessed May 2026.
- Cal Fire. 2024. Alameda County State Responsibility Area Fire Hazard Severity Zones. Effective April 1, 2024.
- California Department of Transportation (Caltrans). 2026. California State Scenic Highway Map.
<https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed: May 2026.
- Evans & De Shazo, LLC. 2015. *Historic Resource Evaluation for the Demolition of the Former Owen Ranch Complex*, Pleasanton Ridge Regional Park, Alameda County. May 19. Oakland, CA: East Bay Regional Parks District.
- Crawford and Associates. 2024. Preliminary Geotechnical Report – Public Access - Garin & Pleasanton Ridge Regional Parks. June 2024.
- GHD. 2025. *Preliminary Hydrology and Hydraulics Study. Chouinard-Owen Properties Public Access*. March 21, 2025.
- Rincon Consultants. 2024. *Historical Resources Assessment for the Chouinard-Owen Public Access Project 33853 Palomares Road, Castro Valley, Alameda County, California 94552*. February 7.
- Rincon Consultants. 2024. *Confidential: Archaeological Resources Assessment for the Chouinard-Owen Public Access Project, 33853 Palomares Road, Castro Valley, Alameda County, California 94552*. April 12.
- WRA Environmental Consultants. 2025. *Biological Resources Technical Report. Garin to Pleasanton Ridge Public Access Project*. Revised April 2025.
- Union City. 2023. 2040 General Plan. Initially adopted 2019.

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Appendices

Appendix A

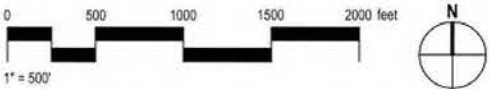
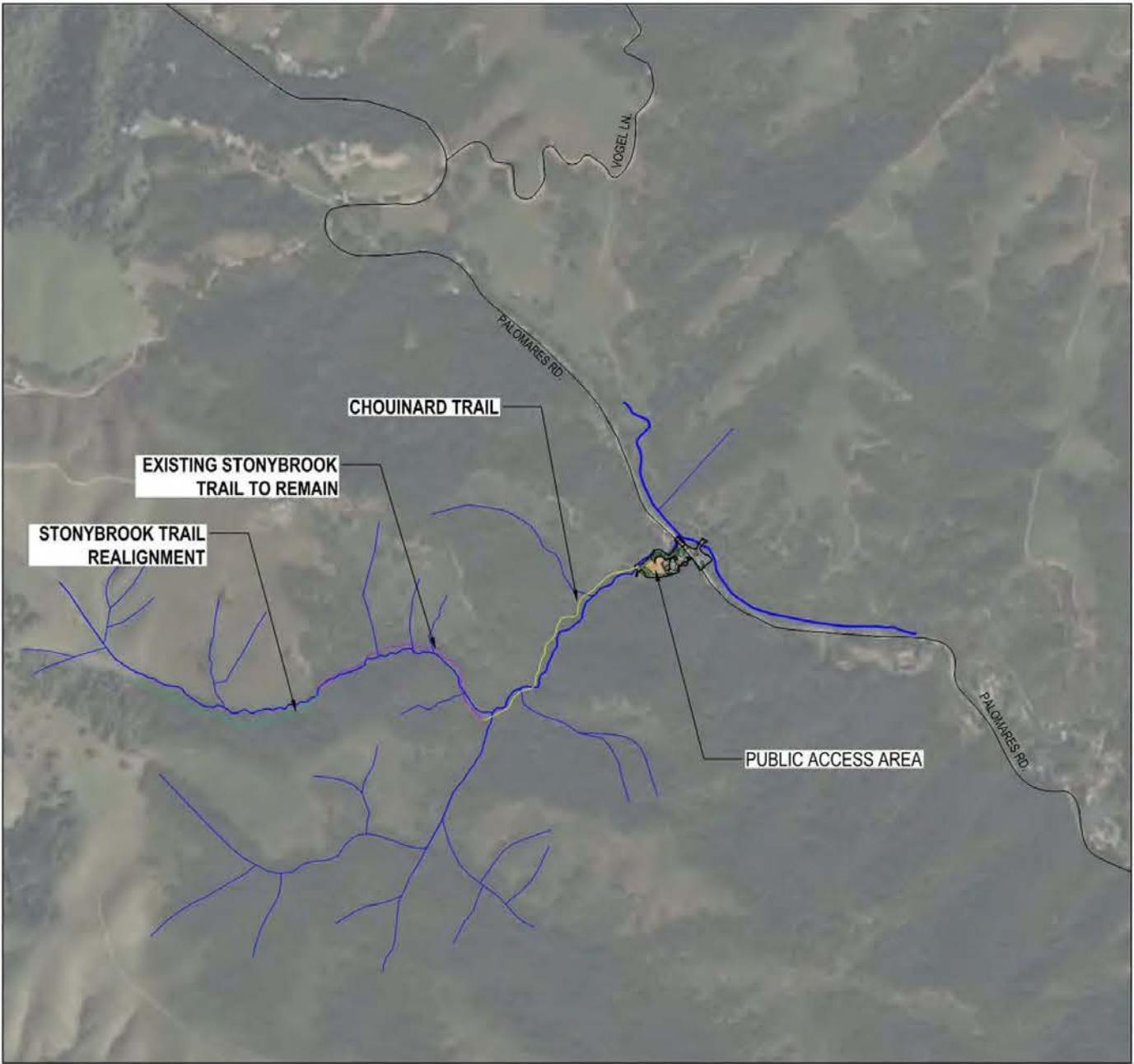
Preliminary 30% Design Plans

CHOUINARD-OWEN PUBLIC ACCESS AND TRAIL PROJECT: 30% DESIGN PLANS

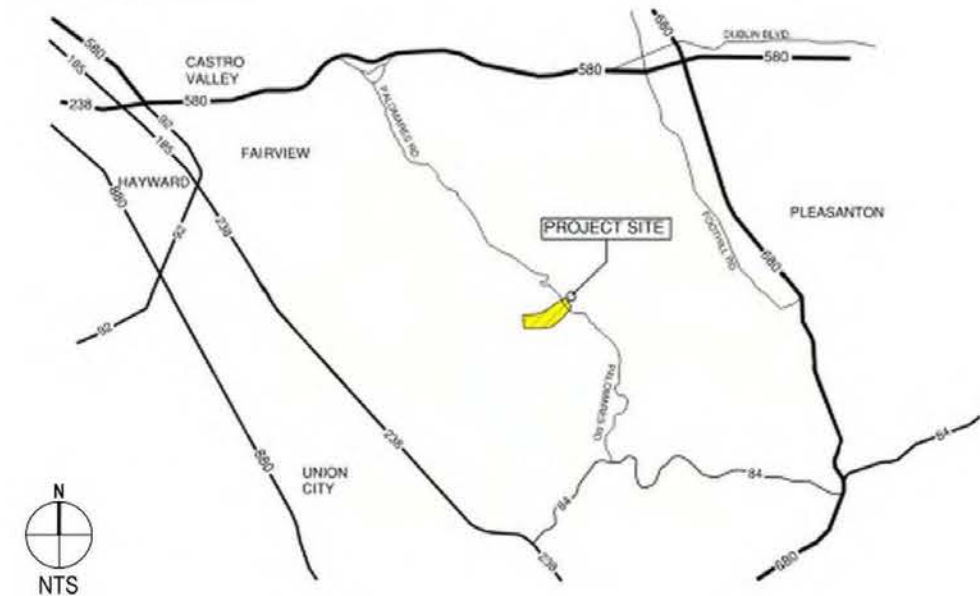


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SITE MAP



VICINITY MAP



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No.	Issue	Checked	Approved	Date
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Client				
EAST BAY REGIONAL PARKS DISTRICT				
Project				
Chouinard-Owen Public Access & Trail Project				

Date	2025-11-12	Scale	AS SHOWN
Project No.	12612075		
Title	Cover Sheet	Size	ARCH D

PRELIMINARY

Sheet No. L001
Sheet 1 of 17

TRAIL CONSTRUCTION NOTES		PLANTING AND SEEDING		REFERENCE NOTES SCHEDULE																																																																																																	
A. GENERAL 1. DEVELOP TRAILS TO CONTOUR ALONGSIDE SLOPES (NOT THE FALL LINE OF A SLOPE) AS FALL-LINE TRAILS BECOME WATERCOURSES, ERODE EASILY AND THEN ARE DIFFICULT TO MAINTAIN. CONTOUR TRAILS SHOULD BE CUT ON A FULL BENCH, RATHER THAN A COMBINATION OF CUT AND FILL, UNLESS OTHERWISE SHOWN.THE CUT MATERIAL SHOULD BE BROADCAST DOWNSLOPE, UNLESS THE TRAIL IS NEAR A CREEK. CUT MATERIAL CAN ALSO BE UTILIZED FOR THE RAMP SECTION OF ROLLING DIPS IF IT IS COMPACTED ONE LAYER AT A TIME. 2. OUT-SLOPE TRAILS IN MOST CASES (EXCEPT FOR SHORT SECTIONS AT OUTSIDE BENDS) TO ENCOURAGE WATER TO RUN OFF THE SIDE OF THE TRAIL, RATHER THEN ALONG THE TRAIL. TRAILS SHOULD BE BUILT TO HAVE ABOUT 3 TO 5 PERCENT OUTSLOPE AFTER TRAIL COMPACTION HAS OCCURRED, SO INITIAL OUT-SLOPING SHOULD BE GREATER THAN 5 PERCENT. AFTER A YEAR OR TWO, IT SHOULD BE EXPECTED THAT MAINTENANCE WOULD BE NEEDED TO RETURN AND 'DE-BERM' SECTIONS OF TRAIL WHERE SOIL COMPACTION AND DISPLACEMENT HAVE EXCEEDED THE OUTSLOPING. 3. INCORPORATE ROLLING DIPS (GRADE REVERSALS 12 TO 20 FEET LONG) THAT AVOID THE SHORT AND ABRUPT STYLE OF TRADITIONAL "WATER BARS" INTO A TRAIL WHERE THEY WILL ENHANCE NATURAL GRADE DIPS (AS A BACKUP TO OUT-SLOPING) TO AVOID WATER FLOW ALONG A TRAIL. 4. LOCATE THE OUTSIDE BEND OF A TRAIL AT A RELATIVE HIGH POINT TO HELP REDUCE EROSION; A REDUCTION IN EROSION IS ACHIEVED BECAUSE THE UPSLOPE NATURALLY SLOWS A BICYCLE RIDER, WHICH REDUCES THE NEED TO BRAKE OR SKID, WHICH CAN DISPLACE SEDIMENTS ON THE TRAIL SURFACE. 5. LOCATE CLIMBING TURNS OR SWITCHBACKS WHENEVER POSSIBLE WHERE THE SIDE-SLOPE IS 10 PERCENT OR LESS, IN ORDER TO CREATE A SUSTAINABLE, LOW-EROSION TRAIL. THE ACTUAL TRAIL GRADIENT SHOULD BE DETERMINED BY SITE GEOLOGY AND TERRAIN. THE WIDER THE TURN AND THE LOWER THE SLOPE OF THE TURN ITSELF, THE LESS BRAKING AND SKIDDING (GOING DOWNHILL) IS NEEDED, AND LESS WHEEL SPINNING (GOING UPHILL) IS LIKELY. 6. REDUCE LOCATIONS WHERE BICYCLES TEND TO BRAKE HEAVILY AND OR HAVE TO CLIMB STEEP HILLS, WHICH COULD CAUSE EROSION. MAKE A CONSCIOUS EFFORT TO DESIGN TRAILS WITH CONSISTENT "FLOW" (MBA), 2004). EXAGGERATE GRADE REVERSALS AT OUTSIDE BENDS. GRADUAL FLOW TRANSITIONS SHOULD ALSO REDUCE USER CONFLICTS. 7. IF LANDSLIDES OR SLOPE FAILURES OCCUR, CUT A TEMPORARY RAMP THROUGH THE EDGE OF THE SCARP, HAVE THE TRAIL TRAVERSE ACROSS THE SLIDE, AND THEN CUT ANOTHER RAMP TO GO UP THE SCARP ON THE OTHER SIDE TO REDUCE THE TENDENCY FOR USERS TO CREATE UNSANCTIONED TRAILS AROUND THE HEAD OF THE LANDSLIDE SCARP. 8. CLOSE TRAILS IN AREAS WITH ACTIVE LANDSLIDES AND HIGHLY ERODIBLE SOILS DURING WET WEATHER AND STORM EVENTS. 9. MAINTAIN THE TRAIL CORRIDOR BY TRIMMING ENCRoACHING VEGETATION TO KEEP TRAIL IN A SAFE AND OPERABLE CONDITION THEREBY ENCOURAGING USERS TO STAY WITHIN THE CONSTRUCTED TRAIL BED. 10. CONFORM TRAIL APPROACHES AS THEY INTERSECT WITH OTHER TRAILS TO REDUCE WATER COLLECTION AT THE JUNCTION AND MODERATE THE SPEED OF TRAIL USERS. 11. MINIMIZE DISTURBANCE TO THE SOIL SURFACE TO REDUCE EROSION AND MAINTENANCE PROBLEMS; MINIMIZED TRAIL WIDTHS TO REDUCE THE AMOUNT OF BARE SOIL SUBJECT TO EROSION AND PRODUCE LESS CONCENTRATED RUNOFF THAN WIDER TRAILS (WITH ALL OTHER FACTORS BEING EQUAL). 12. PREPARE SPECIFIC EROSION CONTROL PLANS AS PART OF THE TRAIL CONSTRUCTION DOCUMENTATION FOR NEW TRAIL ALIGNMENTS. CRITERIA TO BE USED IN DETERMINING THE EROSION POTENTIAL AND DEVELOPING THE PLAN INCLUDE: SLOPE, SOIL TYPE, SOIL COMPOSITION AND PERMEABILITY, AND THE RELATIVE STABILITY OF THE UNDERLYING GEOLOGIC UNIT. 13. INCORPORATE EROSION- AND SEDIMENT-CONTROL MEASURES WHERE TRAILS ARE LOCATED IN RIPARIAN ZONES TO MINIMIZE THE MOBILIZATION OF SEDIMENT TO CREEKS AND OTHER WATER BODIES INCLUDING: * USING PAVING STONES OR OTHER ROCK WORK (TO ARMOR THE TRAIL SURFACE). * PROVIDING SETTLING AREAS FOR TRAIL DRAINAGE WHERE WATER CAN INFILTRATE AND SEDIMENT CAN SETTLE OUT. * CONSTRUCTING CREEK CROSSINGS SO THAT THEY DO NOT GREATLY ALTER THE CROSS-SECTIONAL SHAPE OF THE CHANNEL OR FLOODPLAIN. * SLOPING THE APPROACH TO A CREEK OR DRAINAGE CROSSING DOWNWARD TOWARD THE CREEK AND THEN CLIMBING UPWARD WHEN TRAVELING AWAY FROM THE CREEK DRAINAGE BED, SO THAT IN THE EVENT OF A BLOCKAGE IN THE CHANNEL, THE CREEK WATER WOULD NOT BE DIVERTED TO FLOW ALONG THE TRAIL. * ENCLOSING AND COVERING EXPOSED STOCKPILES OF DIRT OR OTHER LOOSE, GRANULAR CONSTRUCTION MATERIALS THAT COULD CONTRIBUTE SEDIMENT TO WATERWAYS. * CONTAINING SOIL AND FILTERING RUNOFF FROM DISTRIBUTED AREAS BY BERMS, VEGETATED FILTERS, SILT FENCING, STRAW WATTLES, PLASTIC SHEETING, CATCH BASINS, OR OTHER MEANS NECESSARY TO PREVENT THE ESCAPE OF SEDIMENT FROM DISTURBED AREAS. * PROHIBITING THE PLACEMENT OF EARTH OR ORGANIC MATERIAL WHERE IT MAY BE DIRECTLY CARRIED INTO A STREAM, SWALE, DITCH, MARSH, POND, OR BODY OF STANDING WATER. * PROHIBITING THE FOLLOWING TYPES OF MATERIALS FROM BEING RINSED OR WASHED INTO WATERWAYS: CONCRETE, SOLVENTS AND ADHESIVES, FUELS, DIRT, GASOLINE, ASPHALT, AND CONCRETE SAW SLURRY. * ONLY CONDUCTING DEWATERING ACTIVITIES WITH IMPLEMENTATION OF PROPER CONSTRUCTION WATER QUALITY CONTROL MEASURES IN PLACE. 14. USE ROCK DRAINS AND GRAVEL SURFACES WHERE TRAILS CROSS SEEP AREAS TO MINIMIZE POTENTIAL FOR TRAIL USERS TO BYPASS THE SOGGY AREA IN EVER-INCREASING ARCS. USE SOIL AMENDMENTS SUCH AS SAND, CRUSHED ROCK, OR GRAVEL TO MAKE A TRAIL LESS PRONE TO COMPACTION AND DISPLACEMENT; AMENDMENTS CAN ALSO HELP THE TREAD DRAIN BETTER. 15. LIMIT THE SOURCE OF WATER FOR HORSE TROUGHS TO SEEPS, SPRINGS AND EXISTING WATER LINES; DO NOT DIVERT WATER FROM CREEKS OR OTHER WATERWAYS. 16. ABANDON, OBLITERATE AND RESTORE TRAILS WHERE IT HAS BEEN DETERMINED THAT THE TRAIL WOULD BE A SIGNIFICANT RISK TO PARK RESOURCES OR SAFETY OF THE PARK USERS. IN THESE CASES, THE DECOMMISSIONED TRAIL WILL BE: * BLOCKED WITH LOCAL NATIVE VEGETATION MATERIALS SUCH AS LIMBS, LOGS, ROCKS AND BRUSH (OR FENCING) THAT WILL BE PLACED IN SUCH A WAY AS TO CREATE OBSTACLES FOR THE TRAIL USER * REHABILITATED BY FILLING AND RESHAPING THE FORMER TRAIL SURFACE TO BLEND WITH THE NATURAL CONTOURS. IF SOIL COMPACTION HAS OCCURRED, THE SOIL WILL BE SCARIFIED AND AERATED. * REVEGETATED BY PLANTING NATIVE VEGETATION, TRANSPLANTED FROM THE VICINITY, OR SEEDED WITH NATIVE SPECIES FOUND IN THE AREA. * POSTED "NOT A TRAIL, HABITAT RESTORATION TAKING PLACE." ONCE THE OBLITERATION AND RESTORATION HAS BEEN COMPLETED, THE DECOMMISSIONED TRAIL SHOULD BE TOTALLY OBTSCURED, PRESENT A DIFFICULT AND UNCOMFORTABLE ROUTE TO THE POTENTIAL TRAIL USER, AND, IF POSSIBLE, THE VIEW OF THE TRAIL BLOCKED FROM A DESIGNATED TRAIL.		BROADCAST SEEDING A. GENERAL 1. CONTRACTOR MAY PROPOSE HYDROSEEDING APPLICATION AS AN ALTERNATIVE TO BROADCAST SEEDING. AREAS AND METHODS SHALL BE SUBMITTED TO AND ARE SUBJECT TO DISTRICT APPROVAL. 2. CONTRACTOR MAY PROPOSE DRILL SEED APPLICATION AS AN ALTERNATIVE TO BROADCAST SEEDING. AREAS AND METHOODS SHALL BE SUBMITTED TO AND ARE SUBJECT TO DISTRICT APPROVAL. B. TIMING 1. SEEDING SHALL OCCUR UPON COMPLETION OF SOIL PREPARATION WORK AND UPON REQUEST AND RECEIPT OF APPROVAL BY THE DISTRICT. 2. SEED SHALL BE APPLIED BEFORE THE ONSET OF WINTER RAINS. 3. SEEDING SHALL BE COMPLETED BY 15 OCTOBER, UNLESS OTHERWISE APPROVED BY THE DISTRICT. 4. CONTRACTOR SHALL COORDINATE WITH THE DISTRICT FOR PICK-UP AND DELIVERY OF DISTRICT-SUPPLIED SEED AND SHALL REQUEST CONTRACTOR-PROVIDED SEED DELIVERY FROM SUPPLIER NO LESS THAN FIVE (5) WORKING DAYS PRIOR TO APPLICATION. CONTRACTOR SHALL KEEP ALL SEED IN A COOL, DRY, SHADED PLACE UNTIL UTILIZED. 5. CONTRACTOR SHALL COORDINATE WITH THE DISTRICT NO LESS THAN FIVE (5) WORKING DAYS PRIOR TO SEEDING SO THAT THE DISTRICT CAN BE PRESENT DURING SEED APPLICATION. 6. WORK SHALL BE PERFORMED ONLY AT TIMES WHEN WEATHER CONDITIONS AT PROJECT SITE ARE FAVORABLE. NO WORK SHALL BE PERFORMED WHEN WIND CONDITIONS PROHIBIT UNIFORM DISTRIBUTION OF SEED UNLESS APPROVED BY THE DISTRICT. NO WORK SHALL BE PERFORMED AND NO EQUIPMENT SHALL BE OPERATED WHEN SOILS ARE SATURATED. C. LAYOUT 1. SEED SHALL BE APPLIED IN ACCORDANCE TO THE AREAS SHOWN ON PLANS AND ANY ADDITIONAL AREAS IMPACTED BY CONSTRUCTION, INCLUDING UNPAVED ACCESS, STAGING, STOCKPILING, AND HAUL ROUTES NECESSARY TO ACCESS TO SEDIMENT APPLICATION AREAS. 2. CONTRACTOR SHALL FLAG ALL SEEDING AREAS AND THE DISTRICT SHALL APPROVE ALL AREAS TO BE SEEDED PRIOR TO SEEDING. 3. CONTRACTOR SHALL LIMIT FOOT AND EQUIPMENT TRAFFIC AND STORAGE OF SUPPLIES IN SEEDED AREAS. D. PREPARATION OF SEEDING AREAS 1. SOIL PREPARATION WITHIN SEEDING AREAS SHALL OCCUR PRIOR TO BROADCAST SEEDING. ALL EXISTING SURFACES WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE RETURNED TO ORIGINAL EXISTING ELEVATIONS AND CONDITIONS UNLESS OTHERWISE SPECIFIED AND IDENTIFIED ON THE PLANS. ALL DISTURBED ADJACENT GRASSLAND AREAS SHALL BE DE-COMPACTED PRIOR TO SEEDING THROUGH A PROCESS OF RIPPING AND SCARIFYING USING A HARD-TINE HARROW TO CREATE A LOOSE FRIABLE SOIL SURFACE TO A MINIMUM DEPTH OF 3" THAT IS FREE OF CLODS LARGER THAN 1" IN SIZE. 2. CLEAR ALL AREAS TO BE SEEDED OF SUBSTANTIAL DEBRIS AND ANY OTHER IMPEDIMENTS TO SEED-SOIL CONTACT. E. SEED APPLICATION 1. SEED SHALL BE DELIVERED TO THE PROJECT SITE IN UNOPENED SEPARATE CONTAINERS WITH THE SEED TAG ATTACHED. CONTAINERS WITHOUT A SEED TAG ATTACHED WILL NOT BE ACCEPTED. 2. LIMIT FOOT TRAFFIC OR STORAGE OF SUPPLIES IN SEEDED AREAS. 3. APPLY THE SEED MIX EVENLY AND AT THE RATES SPECIFIED IN THE TABLES. BROADCAST APPROPRIATE SEED MIX AT RATES SHOWN WITH MYCORRHIZAL INOCULUM MIXED IN BROADCASTER AT A RATE OF 15 LBS PER ACRE. 4. ANY REMAINING SEED SHALL BE APPLIED EVENLY TO THE AREAS SHOWN ON THE PLANS. 5. CONTRACTOR SHALL USE APPROPRIATE EQUIPMENT SUCH AS A RAKE OR LIGHT HARROW IMMEDIATELY AFTER APPLICATION TO LIGHTLY TO COVER SEED WITH 1/8-INCH TO 1/4-INCH LAYER OF SOIL. SEED COVER SHALL NOT EXCEED 1/4 INCH. 6. FOLLOWING SEEDING, THE CONTRACTOR SHALL HAND BROADCAST STRAW AT A RATE OF ONE (1) TO TWO (2) TONS PER ACRE. STRAW SHALL BE WEED-FREE STALKS FROM WHEAT, RICE, BARLEY, OR NATIVE GRASS FURNISHED IN AIR-DRY CONDITION. STRAW MUST BE FREE OF PLASTIC, GLASS, METAL, ROCKS, AND REFUSE OR OTHER DELETERIOUS MATERIAL. 7. ONCE AREA IS COVERED IN STRAW, THE CONTRACTOR SHALL ANCHOR THE STRAW INTO THE SOIL USING ONE OF THE FOLLOWING TECHNIQUES: 7.1. HAND PUNCHING: 7.1.1. A SPADE OR SHOVEL IS USED TO PUNCH STRAW INTO THE SOIL UNTIL ALL AREAS HAVE STRAW STANDING PERPENDICULARLY TO THE GROUND AND EMBEDDED AT LEAST 4 INCHES. PUNCH ABOUT 12 INCHES APART. 7.2. ROLLER PUNCHING: 7.2.1. A ROLLER EQUIPPED WITH STRAIGHT STUDS NOT LESS THAN 6 INCHES LONG, FROM 4 - 6 INCHES WIDE AND APPROXIMATELY ONE INCH THICK. 7.3. CRIMPER PUNCHING: 7.3.1. USE A CRIMPER WITH SERRATED DISK BLADES ABOUT 4 - 8 INCHES APART, FORCING STRAW MULCH INTO THE SOIL. CRIMPING SHOULD BE DONE IN TWO DIRECTIONS WITH THE FINAL PASS ACROSS THE SLOPE.		REFERENCE NOTES SCHEDULE <table><tr><th>CODE</th><th>DESCRIPTION</th></tr><tr><td>1</td><td>TRAIL HEAD KIOSK</td></tr><tr><td>2</td><td>NATURAL BARRIERS AND "NO PARKING" SIGN OPTIONS</td></tr><tr><td>3</td><td>NEW PRE-FAB SINGLE STALL VAULT TOILET BUILDING</td></tr><tr><td>4</td><td>GRAVEL PARKING AREA</td></tr><tr><td>5</td><td>ADA ACCESSIBLE PATH</td></tr><tr><td>6</td><td>ADA PARKING</td></tr><tr><td>7</td><td>NATIVE ORNAMENTAL LANDSCAPING</td></tr><tr><td>8</td><td>OAK WOODLAND RESTORATION</td></tr><tr><td>9</td><td>NEW AT-GRADE ROAD CROSSING</td></tr><tr><td>10</td><td>MAIN TRAIL CONNECTION POINT</td></tr><tr><td>11</td><td>SITE AMENITY AREA (MAY INCLUDE: WATER FOUNTAIN, PICNIC TABLES, BENCHES, INTERPRETIVE SIGNS, WAYFINDING SIGNS, TRASH RECEPTACLES)</td></tr><tr><td>12</td><td>REMOVABLE VEHICULAR BOLLARDS</td></tr><tr><td>13</td><td>STD 2-RAIL WOOD FENCE</td></tr><tr><td>14</td><td>DBL. 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East Bay Regional Park District

No. Issue	Checked	Approved	Date
Author	L.Piper	Designer	T.Hessel
Drafting Check	L.Piper	Design Check	L.Piper
Project Manager	L.Piper	Project Director	K.Vedula

Client

EAST BAY REGIONAL PARKS DISTRICT

Project

Chouinard-Owen Public Access & Trail Project

Date	2025-11-12	Scale	AS SHOWN
Project No.	12612075		
Title	Landscape Notes, Symbols, and Abbreviations	Size	ARCH D

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Chouinard-Owen Public Access & Trail Project

Date	2025-11-12	Scale	AS SHOWN
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Project No.	12612075
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Landscape Notes, Symbols, and Abbreviations

Size ARCH D



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No.	Issue	Checked	Approved	Date
Author	L.Piper	Designer	T.Hessel	
Drafting	L.Piper	Design	L.Piper	
Check		Check		
Project	L.Piper	Project	K.Vedula	
Manager		Director		

Client
EAST BAY REGIONAL PARKS DISTRICT

Project
Chouinard-Owen Public Access & Trail Project

Date
2025-11-12

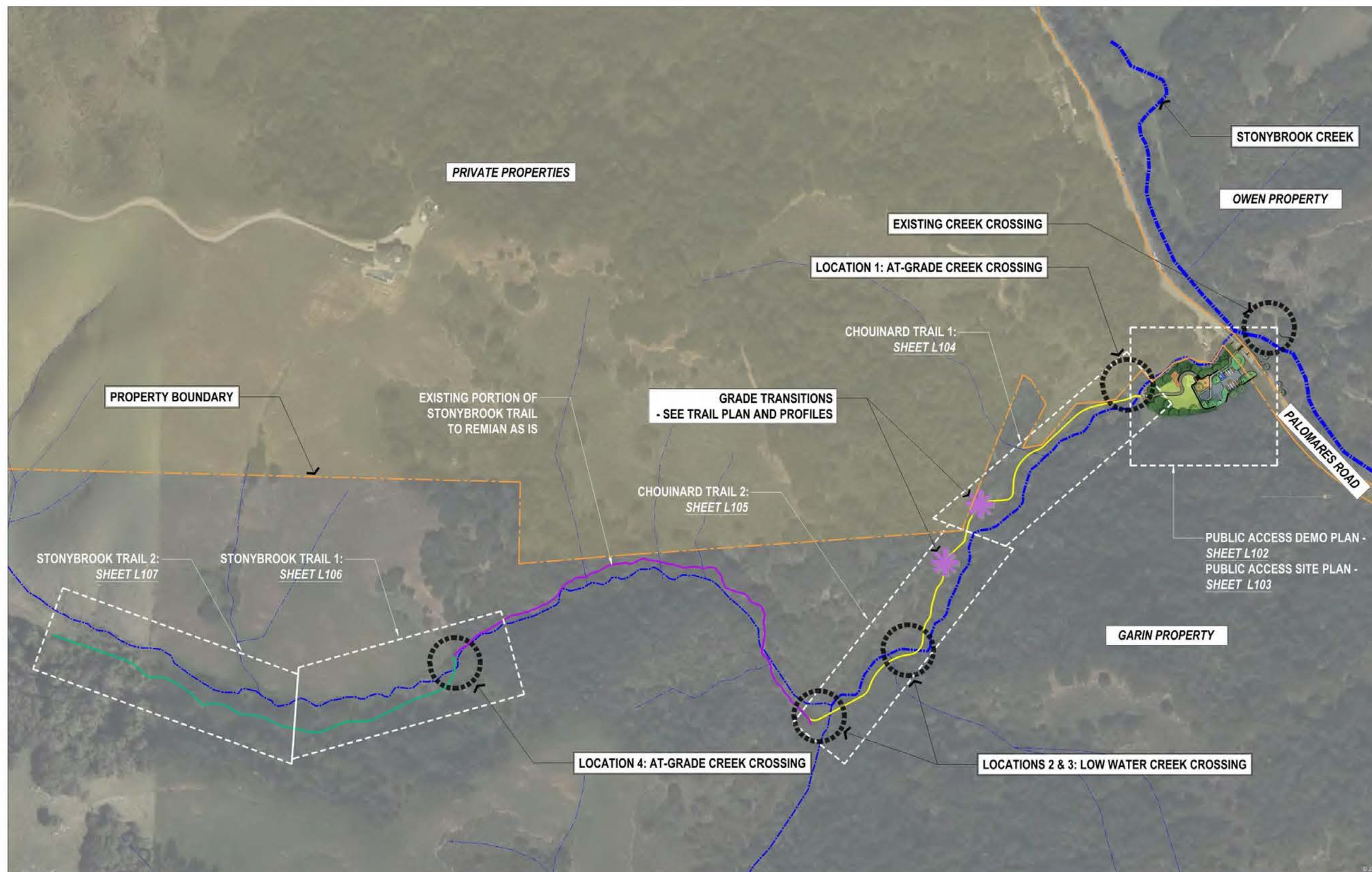
Scale
AS SHOWN

Title
Existing Conditions and Key Map

Size
ARCH D

Sheet No.
L101

Sheet
3 of 17

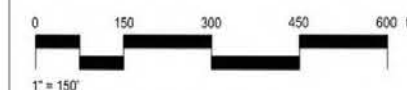


TRAIL LEGEND

- CHOUINARD TRAIL
- STONYBROOK TRAIL REROUTE
- EXISTING STONYBROOK TRAIL
- STREAMS



- WATER CROSSING
- GRADE TRANSITION



PRELIMINARY



DEMOLITION REFERENCE NOTES

CODE	DESCRIPTION
D-01	MAIN BUILDING (2-STORY, 1,981.70 SF FOR ONE STORY)
D-02	STORAGE BUILDING A (1-STORY, 714.70 SF)
D-03	STORAGE BUILDING B (1-STORY, 205.35 SF)
D-04	SHED (1-STORY, 294.69 SF)
D-05	CONCRETE PAVING (3,250.90 SF)
D-06	AC PAVING (514.36 SF)
D-07	ROCKERY RETAINING WALLS (250.64 LF)
D-08	SITE FENCES (79.24 LF)
D-09	ARBOR STRUCTURES (152.47 LF)
D-10	VINE ROWS (86.42 LF)
D-11	GRAVEL ROAD (1,742.64 SF)
D-12	DRIVEWAY ENTRANCE, GATES, PILLAR (518.26 SF)
D-13	LEACH FIELD (1,670.54 SF)
D-14	LIMIT OF WORK (38,997.96 SF)
D-15	EXISTING TREE - PROTECT IN PLACE
D-16	EXISTING WALL - PROTECT IN PLACE
D-17	EXISTING WELL AND TANK - PROTECT IN PLACE
D-18	EXISTING CONCRETE PAVING
D-19	GRAVEL PARKING AREA (7,694.78 SF)
D-20	EXISTING TREE - REMOVE

DEMOLITION LEGEND

	MAIN BUILDING, STORAGE BUILDINGS, SHED
	CONCRETE PAVING
	AC PAVING
	ROCKERY RETAINING WALLS, (STORE ONSITE, TO USE FOR CONSTRUCTION OF NEW ROCK WALLS)
	ARBOR STRUCTURES, VINE ROWS, GATES, PILLAR, AND SITE FENCES
	GRAVEL ROAD, DRIVEWAY ENTRANCE, AND GRAVEL PARKING AREA
	LEACH FIELD
	LIMIT OF CLEARING AND GRUBBING



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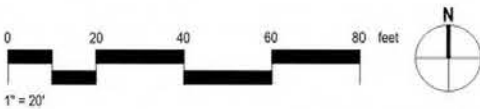
No.	Issue	Checked	Approved	Date
Author	L.Piper	Designer	T.Hessel	
Drafting Check	L.Piper	Design Check	L.Piper	
Project Manager	L.Piper	Project Director	K.Vedula	

Client
EAST BAY REGIONAL PARKS DISTRICT

Project
Chouinard-Owen Public Access & Trail Project

Date	Scale
2025-11-12	AS SHOWN
Project No.	
12612075	
Title	

Public Access Demo Plan



PRELIMINARY

Size
ARCH D

Sheet
L102
4 of 17



CONCEPT PLANT SCHEDULE

NATIVE ORNAMENTAL LANDSCAPE	
TREES	
AESULUS CALIFORNICA / CALIFORNIA BUCKEYE	15 GAL
QUERCUS AGRIFOLIA	15 GAL
SHRUBS	
ARTEMISIA CALIFORNICA / CALIFORNIA SAGEBRUSH	1 GAL
HETEROMELES ARBUTIFOLIA / TOYON	15 GAL
LONICERA HISPIDULA / CALIFORNIA HONEYSUCKLE	1 GAL
LUPINUS ALBIFRONS / BUSH LUPINE	1 GAL
MIMULUS AURANTIACUS / STICKY MONKEYFLOWER	1 GAL
GROUND COVERS	
ACHILLEA MILLEFOLIUM / COMMON YARROW	1 GAL
DESCHAMPSIA ELONGATA / SLENDER HAIRGRASS	1 GAL
DRYOPTERIS ARGUTA / COASTAL WOOD FERN	1 GAL
POLYPODIUM CALIFORNICUM / CALIFORNIA POLYPODY	1 GAL
SISYRINCHIUM BELLUM / BLUE-EYED GRASS	4" POT

OAK WOODLAND RESTORATION	
TREES	
ARBUTUS MENZIESII / PACIFIC MADRONE	15 GAL
PRUNUS VIRGINIANA DEMISSA / WESTERN CHOKECHERRY	15 GAL
QUERCUS AGRIFOLIA / COAST LIVE OAK	15 GAL
SHRUBS	
BACCHARIS PILULARIS / COYOTE BRUSH	1 GAL
FRANGULA CALIFORNICA / CALIFORNIA COFFEEBERRY	1 GAL
HOLODISCUS DISCOLOR / OCEANSpray	1 GAL
RIBES CALIFORNICUM / HILLSIDE GOOSEBERRY	1 GAL
ROSA CALIFORNICA / CALIFORNIA WILD ROSE	1 GAL
SYMPHORICARPOS ALBUS LAEVIGATUS / COMMON SNOWBERRY	1 GAL
GROUND COVERS	
DESCHAMPSIA ELONGATA / SLENDER HAIRGRASS	1 GAL
DRYOPTERIS ARGUTA / COASTAL WOOD FERN	1 GAL
ELYMUS GLAUCUS / BLUE WILDRYE	1 GAL
POLYPODIUM CALIFORNICUM / CALIFORNIA POLYPODY	1 GAL

TRAIL VEGETATION	
TREES	
ACER MACROPHYLLUM / BIG LEAF MAPLE	5 GAL
PLATANUS RACEMOSA / CALIFORNIA SYCAMORE MULTI-TRUNK	5 GAL
UMBELLULARIA CALIFORNICA / BAY LAUREL	5 GAL
SALIX LASIOLEPIS / ARROYO WILLOW	5 GAL
SHRUBS	
ARTEMISIA DOUGLASIANA / MUGWORT	1 GAL
CLEMATIS LIGUSTICIFOLIA / WESTERN WHITE CLEMATIS	1 GAL
CORNUS GLABRATA / BROWN DOGWOOD	1 GAL
OEMLERIA CERASIFORMIS / OSOBERY	1 GAL
JUNCUS OCCIDENTALIS / WESTERN RUSH	1 GAL
JUNCUS PATENS / CALIFORNIA GRAY RUSH	1 GAL
GROUND COVERS	
DESCHAMPSIA ELONGATA / SLENDER HAIRGRASS	1 GAL
ELYMUS GLAUCUS / BLUE WILDRYE	1 GAL
MELICA IMPERFECTA / IMPERFECT MELIC	1 GAL

NATIVE WILDFLOWER & GRASSLAND MEADOW	
GROUND COVERS	
BROMUS LAEVIPES / CHINOOK BROME	SEED
CLARKIA UNGUICULATA / ELEGANT CLARKIA	SEED
DESCHAMPSIA ELONGATA / SLENDER HAIRGRASS	SEED
DIPTEROSTEMON CAPITATUS / BLUE DICKS	SEED
ELYMUS GLAUCUS / BLUE WILDRYE	SEED
ESCHSCHOLZIA CALIFORNICA / CALIFORNIA POPPY	SEED
LUPINUS BICOLOR / MINIATURE LUPINE	SEED
MELICA IMPERFECTA / IMPERFECT MELIC	SEED
RANUNCULUS CALIFORNICUS / CALIFORNIA BUTTERCUP	SEED
STIPA PULCHRA / PURPLE NEEDLE GRASS	SEED



PARKING SUMMARY

THIS CONCEPT CAN ACCOMMODATE MULTIPLE CARS, AND ADA PARKING. IT IS DESIGNED TO BE EXPANDED IN THE FUTURE IF THE NEEDS ARISE.
REGULAR PARKING SPACES - 10
ADA PARKING SPACES - 1

DESIGN HIGHLIGHTS

SITE LAYOUT AREAS

- SITE AMENITY AREA
- GRAVEL ADA ACCESSIBLE TRAIL
- GRAVEL PARKING AREA
- CONCRETE PAVING
- AC DRIVEWAY ENTRANCE
- NATIVE ORNAMENTAL LANDSCAPING
- NATIVE GRASS AND WILDFLOWER MEADOW
- OAK WOODLAND RESTORATION
- TRAILHEAD

REFERENCE NOTES

CODE	DESCRIPTION
1	TRAIL HEAD KIOSK
2	NATURAL BARRIERS AND "NO PARKING" SIGN OPTIONS
3	NEW PRE-FAB SINGLE STALL VAULT TOILET BUILDING
4	GRAVEL PARKING AREA
5	ADA ACCESSIBLE PATH
6	ADA PARKING
7	NEW SITE RETAINING WALL
8	NATIVE ORNAMENTAL LANDSCAPING
9	OAK WOODLAND RESTORATION
10	NEW AT-GRADE ROAD CROSSING
11	MAIN TRAIL CONNECTION POINT
12	(E) ROCKERY WALL
13	SITE AMENITY AREA (MAY INCLUDE: WATER FOUNTAIN, PICNIC TABLES, BENCHES, INTERPRETIVE SIGNS, WAYFINDING SIGNS, TRASH RECEPTACLES)
14	REMOVABLE VEHICULAR BOLLARDS
15	STD 2-RAIL WOOD FENCE
16	DBL PIPE GATE WITH MOTORIZED GATE CLOSER
17	WATER CONNECTION POINT OPPORTUNITY
18	(E) WATER TANK
19	GRAVEL ADA ACCESSIBLE TRAIL
20	SECONDARY AMENITY SPACE (MAY INCLUDE: STUMP SEATING, INTERPRETIVE SIGNAGE, DECORATIVE PAVING)
21	NATIVE GRASS AND WILDFLOWER MEADOW
22	DECOMMISSIONED AND FILLED LEACH FIELD
23	AC PAVING ENTRY
24	DISTRICT MONUMENT SIGN
25	PROPOSED NATIVE TREE
26	EXISTING TREE
27	CONCRETE WHEEL STOP

SURFACE CALCULATIONS

SURFACE	EXISTING (SF)	PROPOSED (SF)	DIFFERENCE
ASPHALT	3,765	514	1,275
CONCRETE	3,251	1,338	-1,913
BUILDINGS	3,195	105	-3,090
NATIVE ORNAMENTAL LANDSCAPING		6,644	6,644
NATIVE GRASS AND WILDFLOWER MEADOW		8,665	8,665
NATIVE OAK WOODLAND RESTORATION		15,798	15,798
GRAVEL LOT	9,437	6,058	-3,379
TOTAL	16,399	39,883	23,484



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East Bay
Regional Park District

No.	Issue	Checked	Approved	Date
Author	V.Serrano	Designer	T.Hessel	
Drafting	L.Piper	Design	L.Piper	
Check		Check		
Project	L.Piper	Project	K.Vedula	
Manager		Director		
Client				

EAST BAY REGIONAL PARKS DISTRICT

Project
Chouinard-Owen Public Access & Trail Project

Date: 2025-11-12
Scale: AS SHOWN

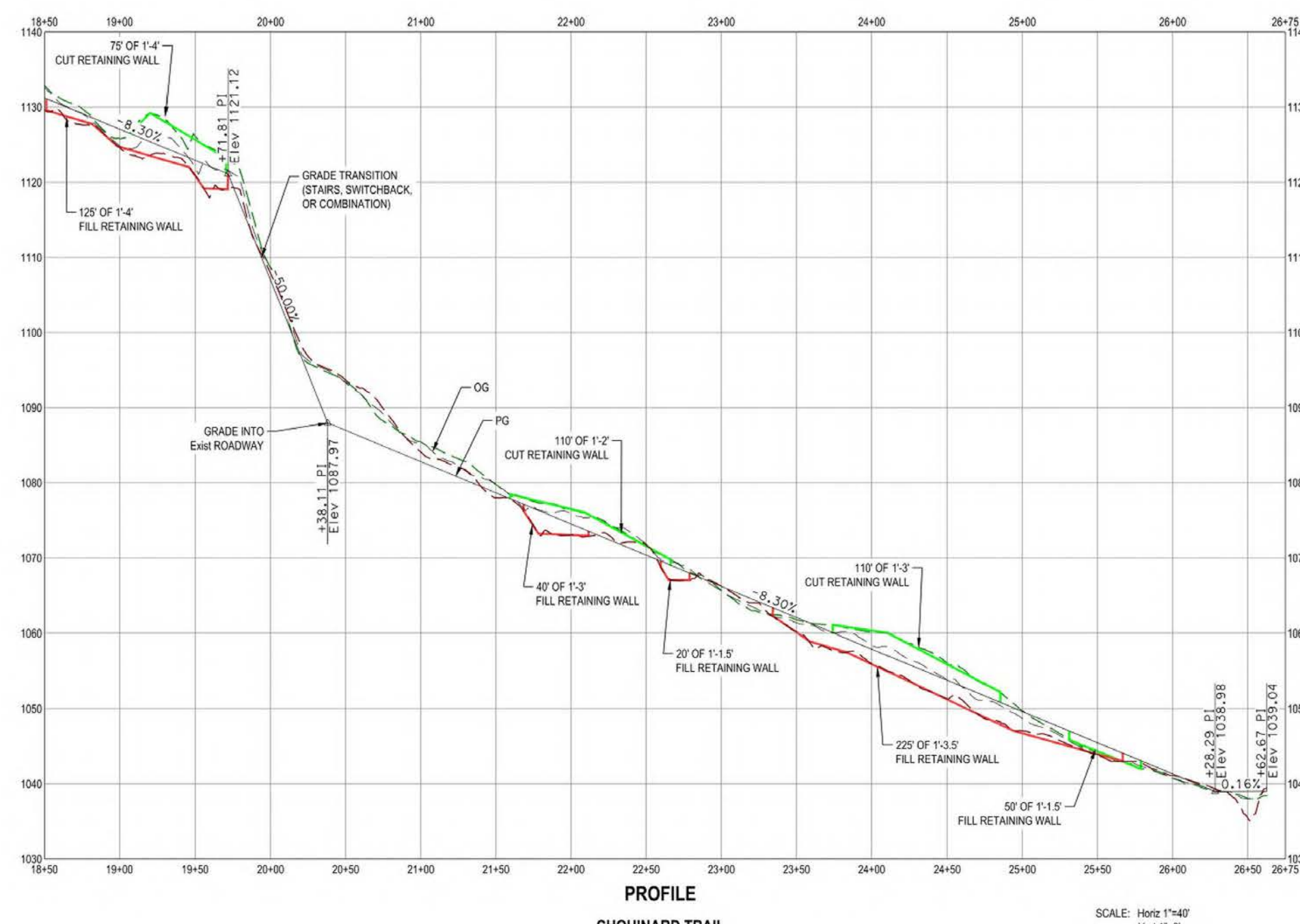
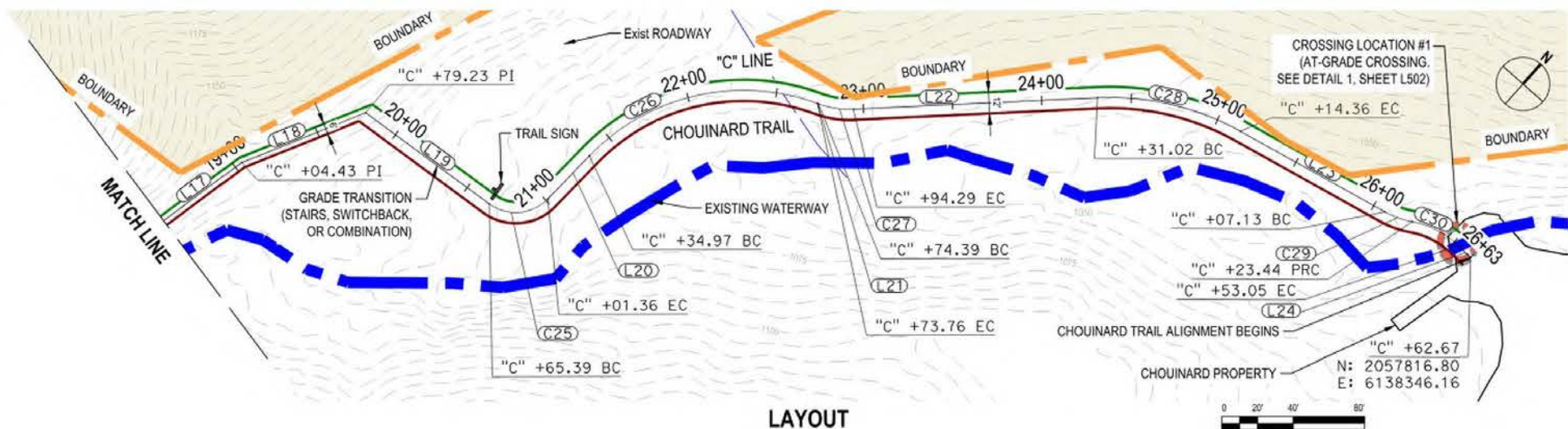
Project No.: 12612075

Title: Public Access Site Plan

Sheet No.: L103

Sheet: 5 of 17

PRELIMINARY



NOTES

1. TRAIL SIGNS AT GRADE TRANSITIONS TO INCLUDE THE FOLLOWING INFORMATION:

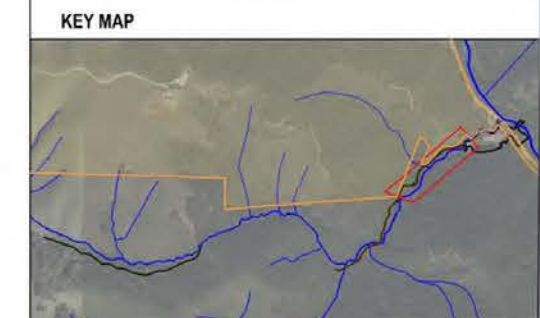
- A. DISTANCE TO NEAREST TRAIL INTERSECTION AND TRAIL HEAD.
- B. TRAIL TYPE, ACCESSIBILITY LIMITATIONS, AND RESTRICTIONS.
- C. TRAIL CHARACTERISTICS INCLUDING:
 - LENGTH
 - WIDTH
 - GRADIENT SLOPES (RUNNING AND CROSS)
 - SURFACE TYPE
 - OBSTACLES, LOCATION, AND MAGNITUDE

LAYOUT LEGEND

- CROSSINGS LOCATIONS
- PROPERTY BOUNDARY
- CENTER OF PROPOSED TRAIL
- LEFT OF PROPOSED TRAIL
- RIGHT OF PROPOSED TRAIL
- WATERWAY

PROFILE LEGEND

- EXISTING CONDITIONS CENTER OF TRAIL
- EXISTING CONDITION LEFT OF TRAIL
- EXISTING CONDITION RIGHT OF TRAIL
- CENTER OF TRAIL
- RETAINING WALL LEFT OF TRAIL
- RETAINING WALL RIGHT OF TRAIL



LINE AND CURVE DATA "C" LINE				
No. (X)	R	Δ	T	L
L18	-	N27°24'31"E	-	74.80'
L19	-	N85°43'44"E	-	86.16'
C25	25.00'	082°26'34"	21.90'	35.97'
L20	-	N03°17'10"E	-	33.61'
C26	120.00'	066°16'07"	78.33'	138.79'
L21	-	N69°33'16"E	-	0.54'
C27	50.00'	022°54'46"	10.13'	20.00'
C28	150.00'	031°50'05"	42.78'	83.34'
L23	-	N78°28'35"E	-	92.76'
C29	50.00'	018°41'58"	8.23'	16.32'
C30	50.00'	033°55'52"	15.25'	29.61'
L24	-	S86°17'31"E	-	9.62'
L22	-	N46°38'30"E	-	136.73'



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East Bay Regional Park District

No.	Issue	Checked	Approved	Date
Author	M.Hight	Designer	C.Doud	
Drafting Check	L.Piper	Design Check	B.Swearingen	
Project Manager	L.Piper	Project Director	K.Vedula	

Client

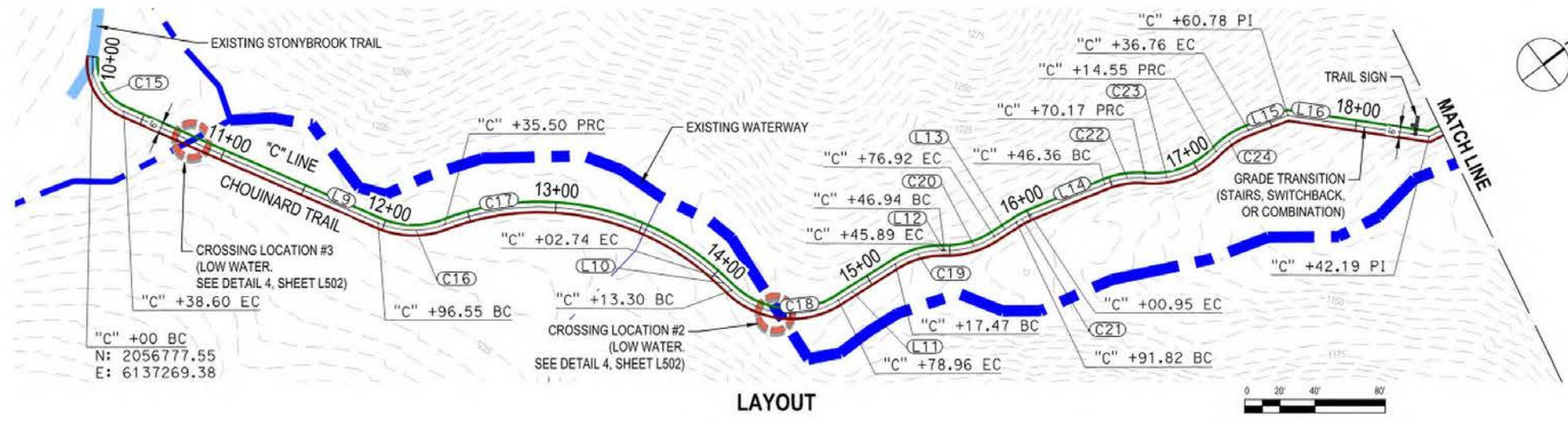
EAST BAY REGIONAL PARKS DISTRICT

Project

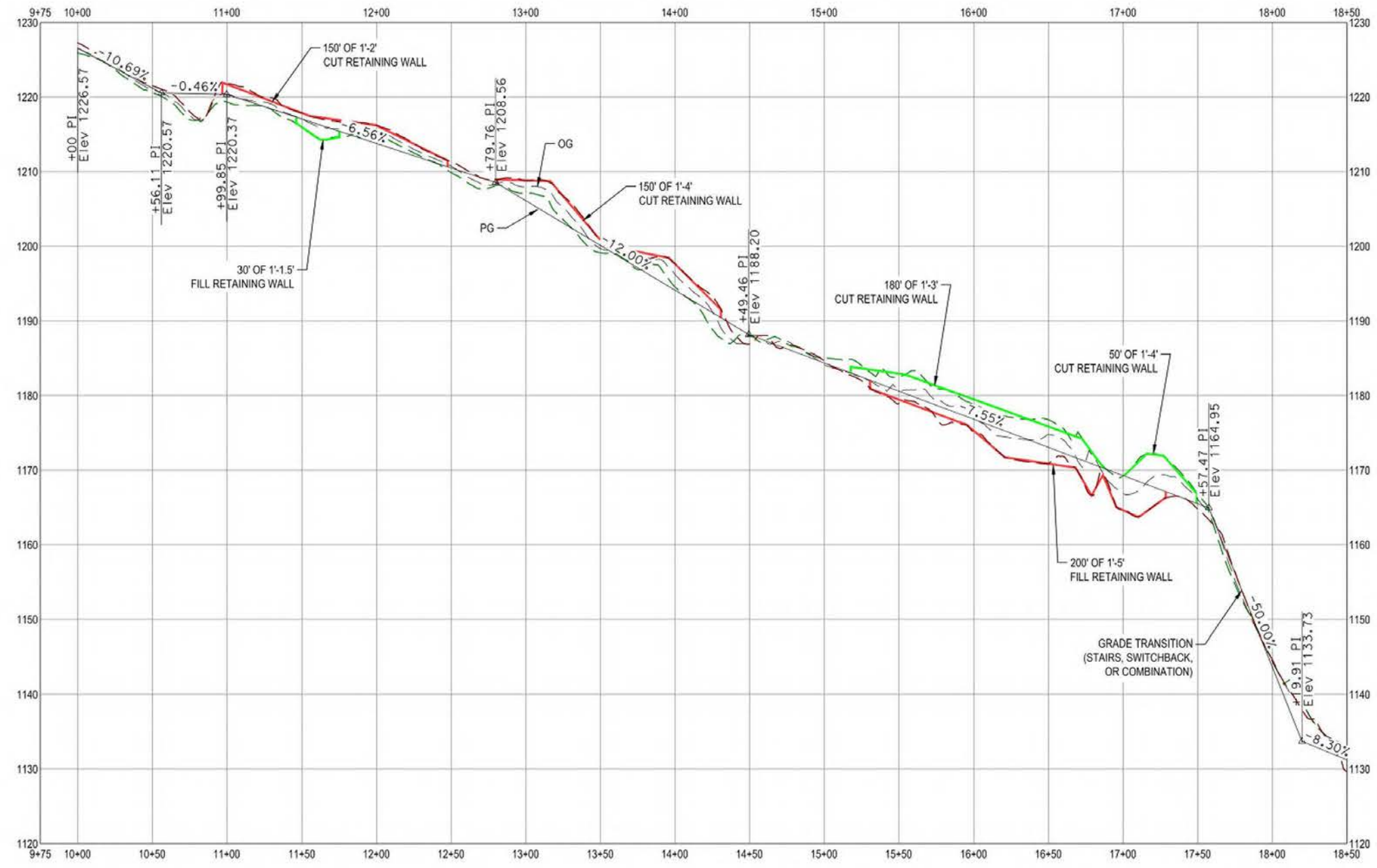
Chouinard-Owen Public Access & Trail Project

Date	2025-11-12	Scale	AS SHOWN
Project No.	12612075		
Title	Trail Plan and Profile Sheet (1 of 4)	Sheet No.	L104
		Sheet	6 of 17

PRELIMINARY



LAYOUT



PROFILE
CHOUINARD TRAIL

SCALE: Horiz 1"=40'
Vert 1"=8'

NOTES

1. TRAIL SIGNS AT GRADE TRANSITIONS TO INCLUDE THE FOLLOWING INFORMATION:
a. DISTANCE TO NEAREST TRAIL INTERSECTION AND TRAIL HEAD.
b. TRAIL TYPE, ACCESSIBILITY LIMITATIONS, AND RESTRICTIONS.
c. TRAIL CHARACTERISTICS INCLUDING:
- LENGTH
- WIDTH
- GRADIENT SLOPES (RUNNING AND CROSS)
- SURFACE TYPE
- OBSTACLES, LOCATION, AND MAGNITUDE

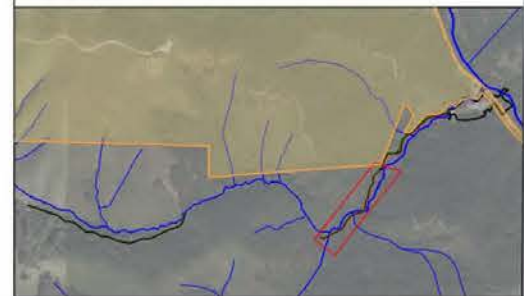
LAYOUT LEGEND

- CROSSINGS LOCATIONS
- CENTER OF PROPOSED TRAIL
- LEFT OF PROPOSED TRAIL
- RIGHT OF PROPOSED TRAIL
- WATERWAY
- EXISTING TRAIL

PROFILE LEGEND

- EXISTING CONDITIONS CENTER OF TRAIL
- EXISTING CONDITION LEFT OF TRAIL
- EXISTING CONDITION RIGHT OF TRAIL
- CENTER OF TRAIL
- RETAINING WALL LEFT OF TRAIL
- RETAINING WALL RIGHT OF TRAIL

KEY MAP



LINE AND CURVE DATA
"C" LINE

No. (X)	R	Δ	T	L
L18	-	N27°24'31"E	-	74.80'
L19	-	N85°43'44"E	-	86.16'
C25	25.00'	082°26'34"	21.90'	35.97'
L20	-	N03°17'10"E	-	33.61'
C26	120.00'	066°16'07"	78.33'	138.79'
L21	-	N69°33'16"E	-	0.54'
C27	50.00'	022°54'46"	10.13'	20.00'
C28	150.00'	031°50'05"	42.78'	83.34'
L23	-	N78°28'35"E	-	92.76'
C29	50.00'	018°41'58"	8.23'	16.32'
C30	50.00'	033°55'52"	15.25'	29.61'
L24	-	S86°17'31"E	-	9.62'
L22	-	N46°38'30"E	-	136.73'



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East Bay Regional Park District

No.	Issue	Checked	Approved	Date
Author	M.Hight	Designer	C.Doud	
Drafting Check	L.Piper	Design Check	B.Swearingen	
Project Manager	L.Piper	Project Director	K.Vedula	

Client
EAST BAY REGIONAL PARKS DISTRICT

Project
Chouinard-Owen Public Access & Trail Project

Date: 2025-11-12
Scale: AS SHOWN

Project No.: 12612075

Title
**Trail Plan and Profile
Sheet (2 of 4)**

PRELIMINARY

Sheet No.: L105
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East Bay Regional Park District

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 - c. TRAIL CHARACTERISTICS INCLUDING:
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 - GRADIENT SLOPES (RUNNING AND CROSS)
 - SURFACE TYPE
 - OBSTACLES, LOCATION, AND MAGNITUDE

LAYOUT LEGEND

- CROSSINGS LOCATIONS
- CENTER OF PROPOSED TRAIL
- LEFT OF PROPOSED TRAIL
- RIGHT OF PROPOSED TRAIL
- WATERWAY
- EXISTING TRAIL

PROFILE LEGEND

- EXISTING CONDITIONS CENTER OF TRAIL
- EXISTING CONDITION LEFT OF TRAIL
- EXISTING CONDITION RIGHT OF TRAIL
- CENTER OF TRAIL
- RETAINING WALL LEFT OF TRAIL
- RETAINING WALL RIGHT OF TRAIL

KEY MAP



LINE AND CURVE DATA "S" LINE

No.⊗	R	Δ	T	L
L4	-	S78°05'52"E	-	87.29'
C10	100.00'	035°19'54"	31.85'	61.67'
L5	-	N66°34'14"E	-	46.85'
C11	100.00'	024°18'33"	21.54'	42.43'
L6	-	S89°07'13"E	-	26.63'
C12	100.00'	026°55'54"	23.94'	47.00'
L7	-	N63°56'53"E	-	129.65'
C13	200.00'	008°09'07"	14.25'	28.46'
L8	-	N72°06'00"E	-	54.57'
C14	90.12'	091°57'46"	93.26'	144.65'

No. Issue Checked Approved Date

Author M.Hight Designer C.Doud

Drafting Check L.Piper Design Check B.Swearingen

Project Manager L.Piper Project Director K.Vedula

Client

EAST BAY REGIONAL PARKS DISTRICT

Project

Chouinard-Owen Public Access & Trail Project

Date 2025-11-12 Scale AS SHOWN

Project No. 12612075

Title

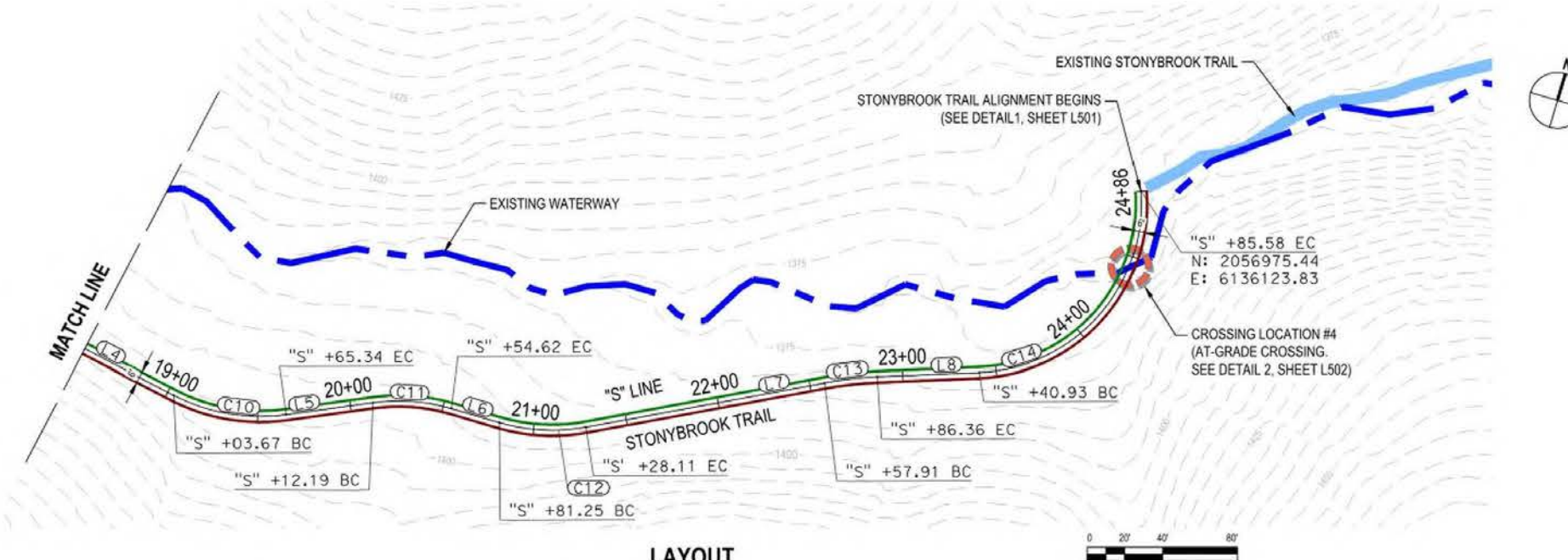
Trail Plan and Profile

Sheet (3 of 4)

Sheet No. L106

Sheet 8 of 17

PRELIMINARY

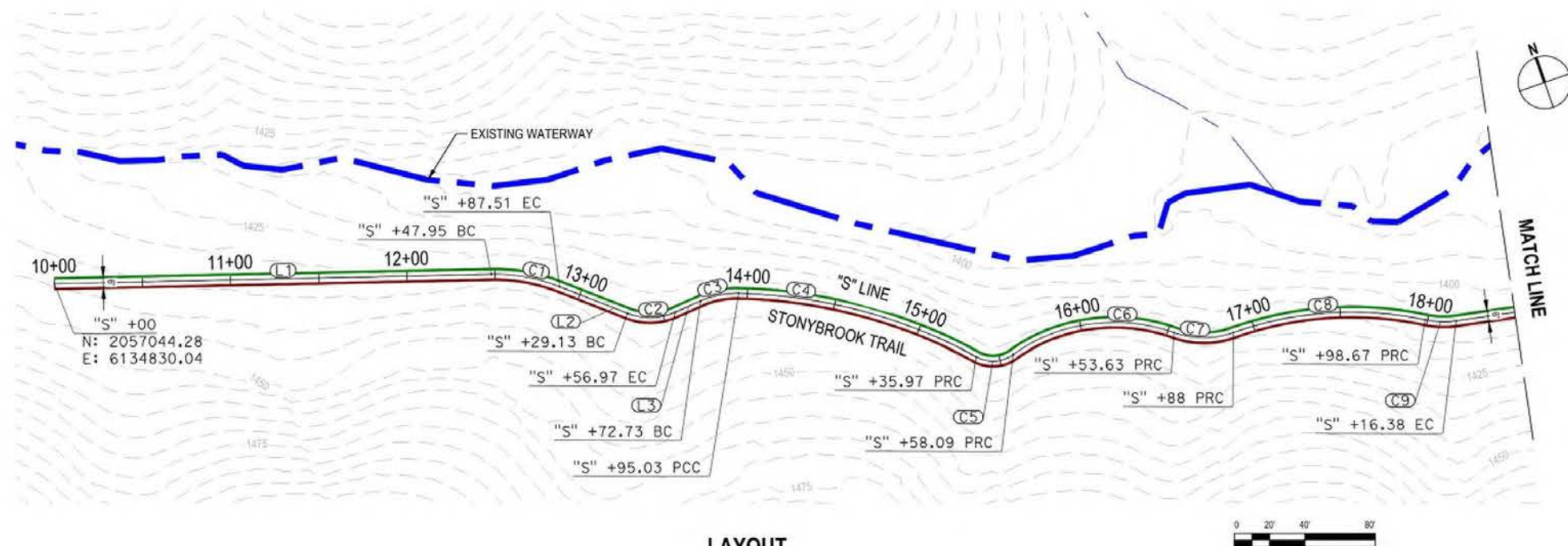


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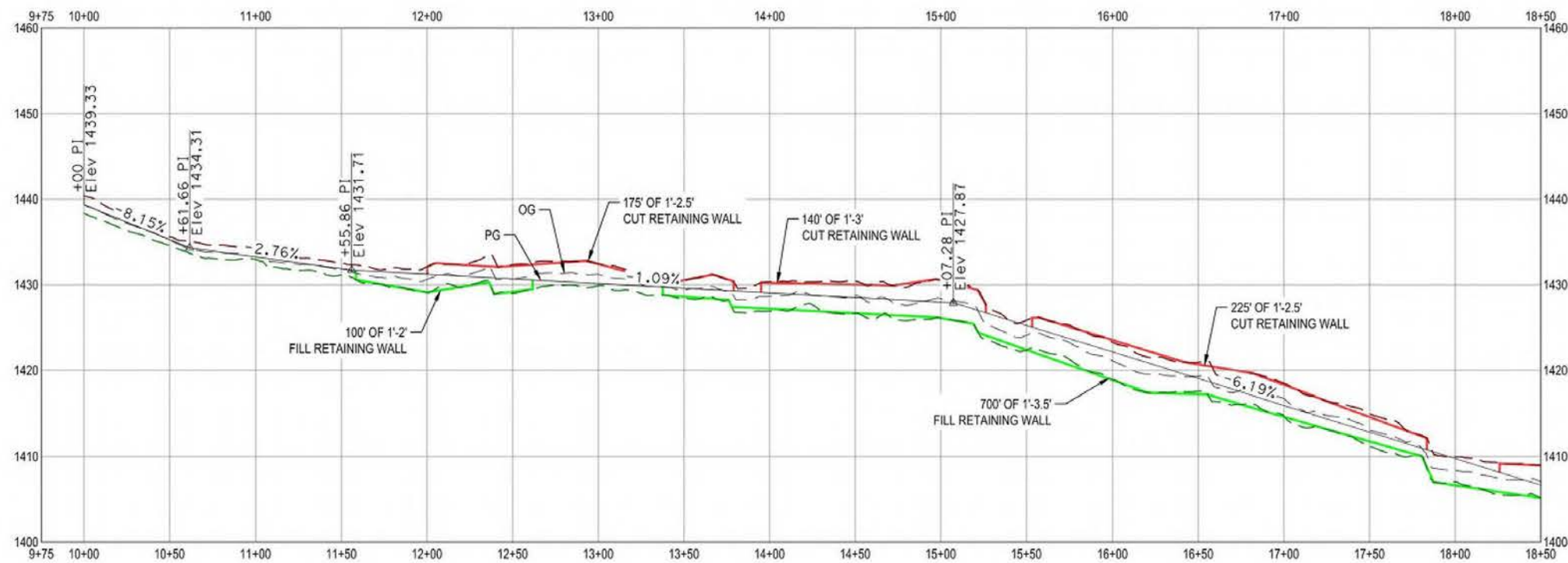


PROFILE
STONYBROOK TRAIL

SCALE: Horiz 1"=40'
Vert 1"=8'



LAYOUT



PROFILE
STONYBROOK TRAIL

SCALE: Horiz 1"=40'
Vert 1"=8'

NOTES

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 - c. TRAIL CHARACTERISTICS INCLUDING:
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 - SURFACE TYPE
 - OBSTACLES, LOCATION, AND MAGNITUDE

LAYOUT LEGEND

- CENTER OF PROPOSED TRAIL
- LEFT OF PROPOSED TRAIL
- RIGHT OF PROPOSED TRAIL
- - - WATERWAY

PROFILE LEGEND

- - - EXISTING CONDITIONS CENTER OF TRAIL
- - - EXISTING CONDITION LEFT OF TRAIL
- - - EXISTING CONDITION RIGHT OF TRAIL
- CENTER OF TRAIL
- RETAINING WALL LEFT OF TRAIL
- RETAINING WALL RIGHT OF TRAIL

KEY MAP



LINE AND CURVE DATA "S" LINE

No. (X)	R	Δ	T	L
L1	-	S71°02'51"E	-	247.95'
C1	100.00'	022°40'01"	20.04'	39.56'
L2	-	S48°22'50"E	-	41.61'
C2	35.00'	045°34'52"	14.71'	27.84'
L3	-	N86°02'18"E	-	15.76'
C3	50.00'	025°33'30"	11.34'	22.30'
C4	300.00'	026°55'00"	71.79'	140.94'
C5	20.00'	063°22'09"	12.34'	22.12'
C6	100.00'	054°44'33"	51.77'	95.54'
C7	50.00'	039°23'13"	17.90'	34.37'
C8	200.00'	031°42'13"	56.79'	110.67'
C9	50.00'	020°18'06"	8.95'	17.72'



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EAST BAY REGIONAL PARKS DISTRICT				
Project				
Chouinard-Owen Public Access & Trail Project				

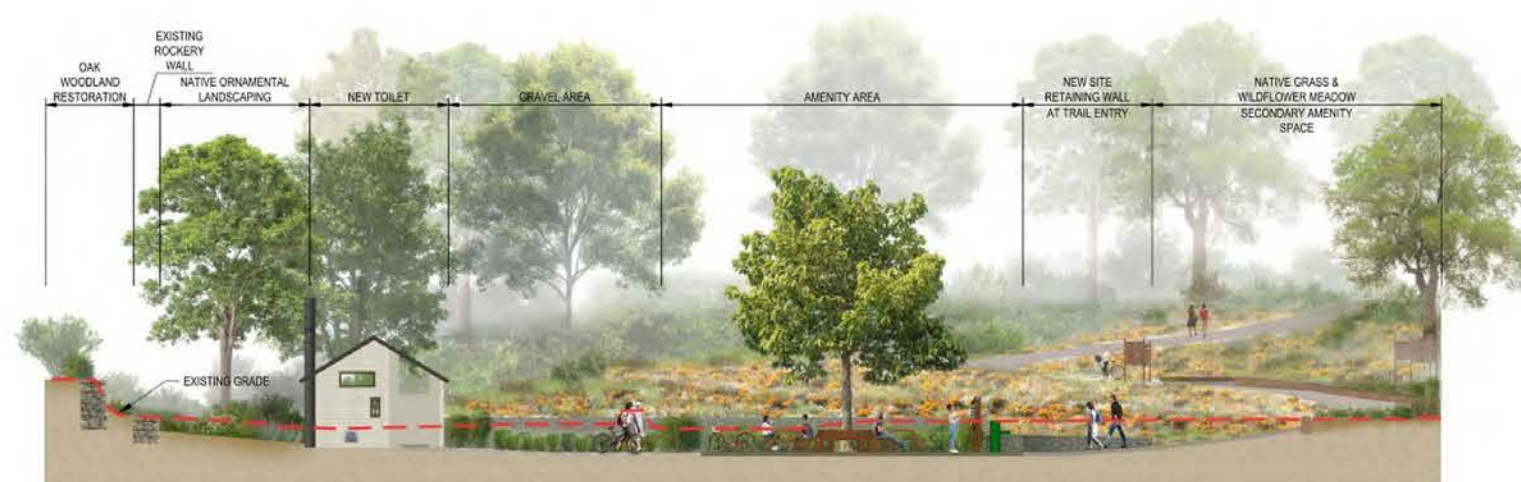
Date	2025-11-12	Scale	AS SHOWN
Project No.	12612075		
Title	Trail Plan and Profile Sheet (4 of 4)		

PRELIMINARY

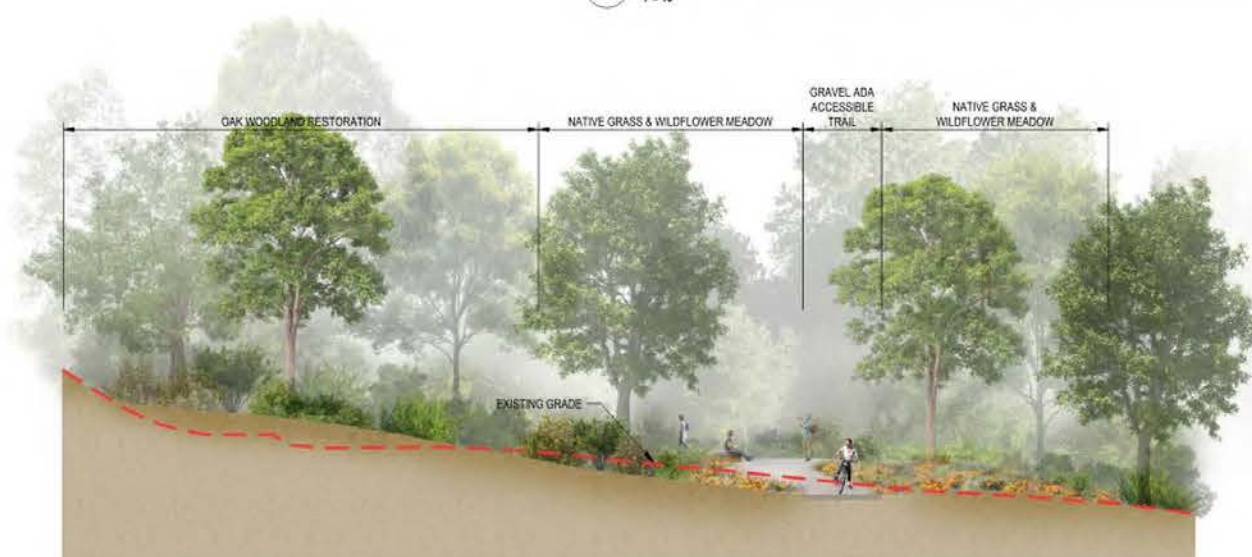
Sheet No. **L107**
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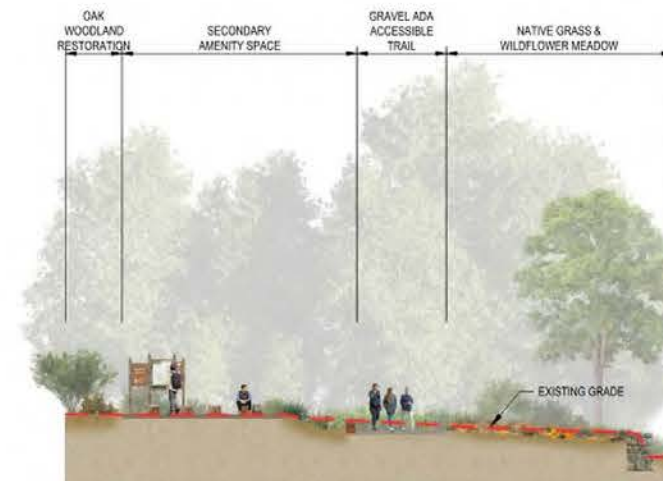
1 ELEVATION 1
1" = 10'



2 ELEVATION 2
1" = 10'



3 ELEVATION 3
1" = 10'



4 ELEVATION 4
1" = 10'

No.	Issue	Checked	Approved	Date
Author	L.Legaspi	Designer	L.Piper	
Drafting Check	L.Piper	Design Check	L.Piper	
Project Manager	L.Piper	Project Director	K.Vedula	

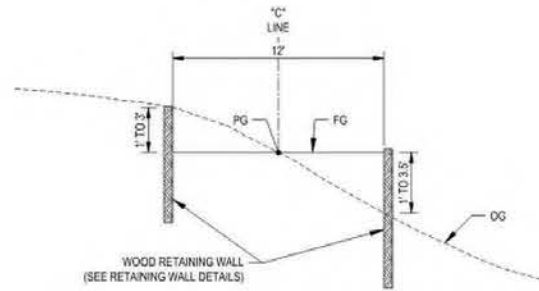
Client
EAST BAY REGIONAL PARKS DISTRICT

Project
Chouinard-Owen Public Access & Trail Project

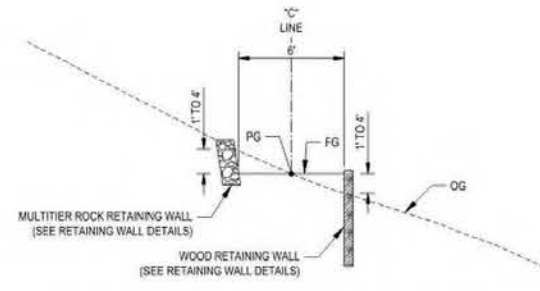
Date	2025-11-12	Scale	AS SHOWN
Project No.	12612075		

Title
Sections - Public Access

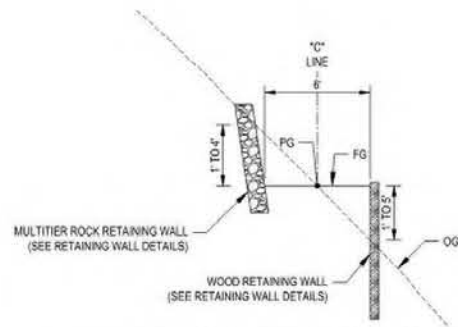
PRELIMINARY



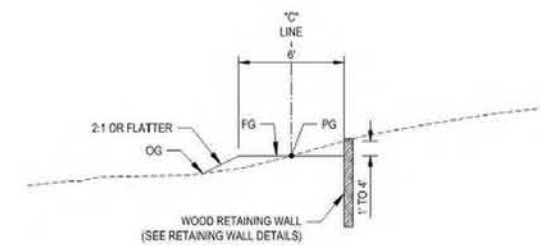
1 TYPICAL SECTION - CHOUINARD TRAIL
NO SCALE
"C" LINE STA 20+38.11 TO STA 26+62.67



2 TYPICAL SECTION - CHOUINARD TRAIL
NO SCALE
"C" LINE STA 18+19.91 TO STA 19+71.81



3 TYPICAL SECTION - CHOUINARD TRAIL
NO SCALE
"C" LINE STA 14+49.46 TO STA 17+57.47



4 TYPICAL SECTION - CHOUINARD TRAIL
NO SCALE
"C" LINE STA 10+00.00 TO STA 14+49.46

TRAIL LEGEND



NOTES

- FOR LIMITS AND HEIGHTS OF RETAINING WALLS SEE TRAIL PLAN AND PROFILE SHEETS



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original size sheet
0 1"

No.	Issue	Checked	Approved	Date
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Author	M.Hight	Designer	C.Doud	
Drafting Check	L.Piper	Design Check	B.Swearingen	
Project Manager	L.Piper	Project Director	K.Vedula	

Client

EAST BAY REGIONAL PARKS DISTRICT

Project

Chouinard-Owen Public Access & Trail Project

Date	2025-11-12	Scale	AS SHOWN
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Project No.	12612075
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Title	Sections - Trail (1 of 2)
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Sheet No.	L302
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Sheet	11 of 17
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PRELIMINARY

TRAIL LEGEND

- MULTITIER STONE RETAINING WALL
- WOOD RETAINING WALL

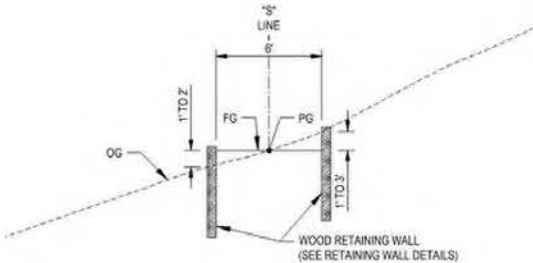
NOTES

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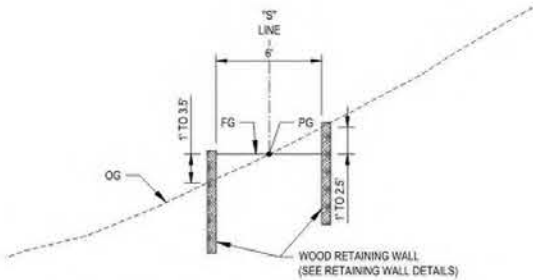


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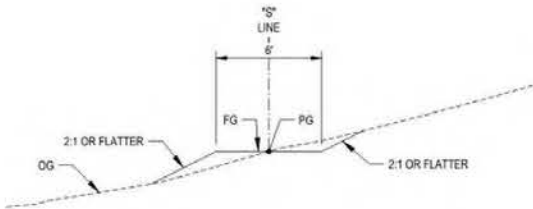
Bar is one inch on original size sheet
0 1"



5 TYPICAL SECTION - STONYBROOK TRAIL
NO SCALE
"S" LINE STA 20+00.00 TO STA 24+85.58



6 TYPICAL SECTION - STONYBROOK TRAIL
NO SCALE
"S" LINE STA 11+50.00 TO STA 20+00.00



7 TYPICAL SECTION - STONYBROOK TRAIL
NO SCALE
"S" LINE STA 10+00.00 TO STA 11+50.00

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Drafting Check	L.Piper	Design Check	B.Swearingen	
Project Manager	L.Piper	Project Director	K.Vedula	

Client
EAST BAY REGIONAL PARKS DISTRICT

Project
Chouinard-Owen Public Access & Trail Project

Date
2025-11-12

Scale
AS SHOWN

Project No.
12612075

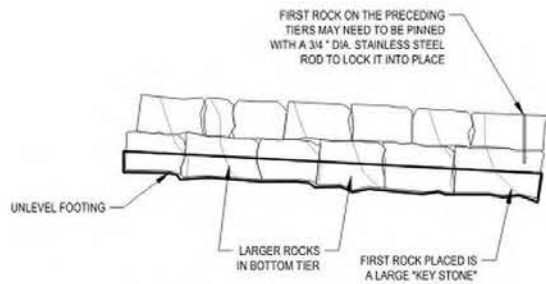
Title
Sections - Trail (2 of 2)

Size
ARCH D

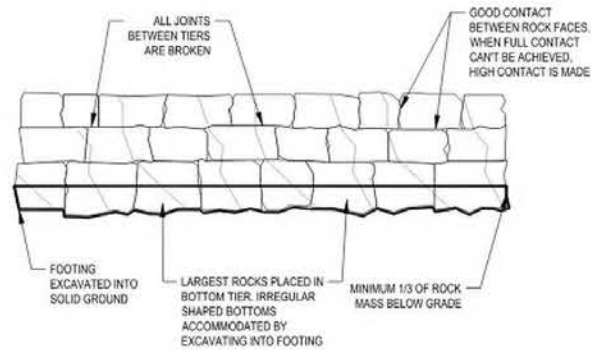
PRELIMINARY

Sheet No.
L303

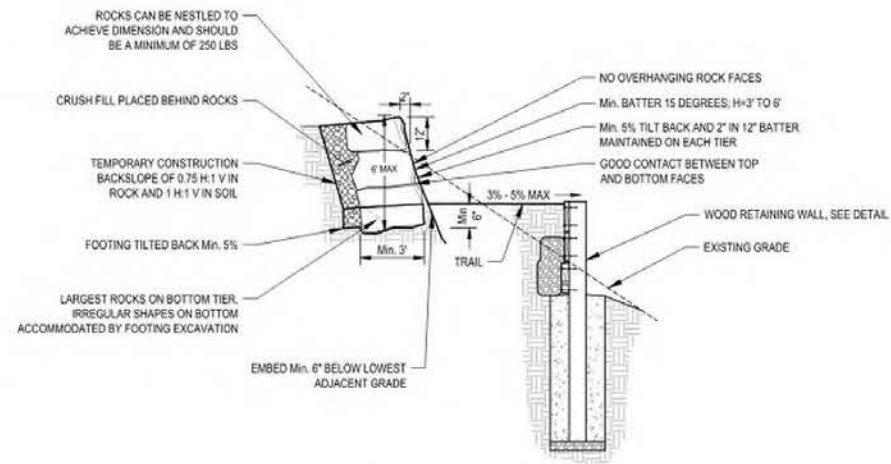
Sheet
12 of 17



MULTITIER ROCK WALL WITH UNLEVEL FOOTING (FRONT VIEW)



MULTITIER ROCK WALL FUNDAMENTALS (FRONT VIEW)



1 MULTITIER ROCK WALL FUNDAMENTALS (END VIEW)
NOT TO SCALE

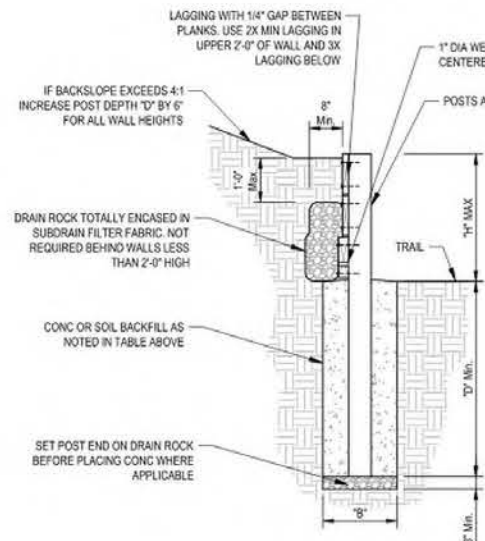
WOOD RETAINING WALL POST SIZE AND SPACING TABLE					
HEIGHT "H"	SPACING "S"	NOMINAL SIZE	HOLE DIA "B"	DEPTH "D"	BACKFILL MATERIAL
1' - 0"	6' - 0"	6 x 6	12" ±	2' - 9"	SOIL
	6' - 0"	4 x 4	12"	2' - 3"	CONC
1' - 6"	4' - 0"	6 x 6	12" ±	3' - 4"	SOIL
	4' - 0"	4 x 4	12"	2' - 9"	CONC
	6' - 0"	4 x 4	12"	3' - 4"	CONC
	6' - 0"	4 x 4	18"	2' - 9"	CONC
2' - 0"	4' - 0"	4 x 4	12"	3' - 8"	CONC
	6' - 0"	4 x 4	18"	3' - 8"	CONC
	6' - 0"	4 x 4	24"	3' - 3"	CONC
	6' - 0"	6 x 6	18"	4' - 0"	CONC
2' - 6"	4' - 0"	6 x 6	24"	4' - 0"	CONC
	6' - 0"	6 x 6	24"	4' - 0"	CONC

MINIMUM POST SPACING IS 3 TIMES THE HOLE DIA "B"

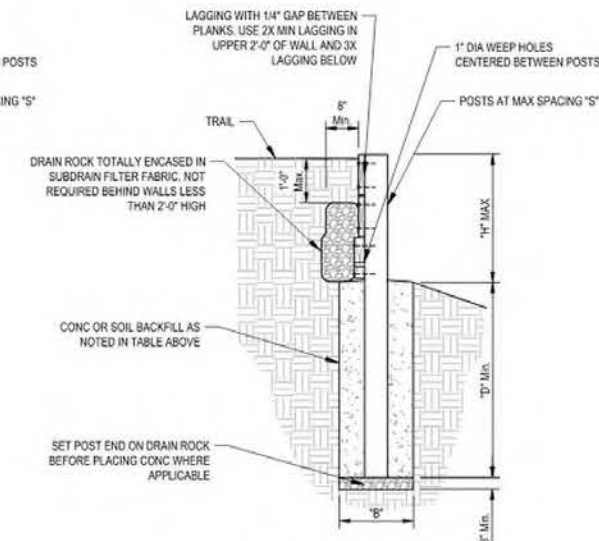
MINIMUM HOLE DIA IS 18" FOR 6 x 6 POST IN CONC

FOR "H" GREATER THAN 2.5', USE THE FOLLOWING FOR DESIGN OF THE WALL:

1. FOR INBOARD WALLS RETAINING CUT SLOPES, USE AN ACTIVE PRESSURE OF 80 PCF.
2. FOR OUTBOARD WALLS RETAINING FILL SLOPES, USE AN ACTIVE PRESSURE OF 44 PCF.
3. USE A NOMINAL PASSIVE PRESSURE OF 300 PCF. FOR OUTBOARD RETAINING WALLS, IGNORE THE UPPER 3 FT OF PASSIVE PRESSURE.

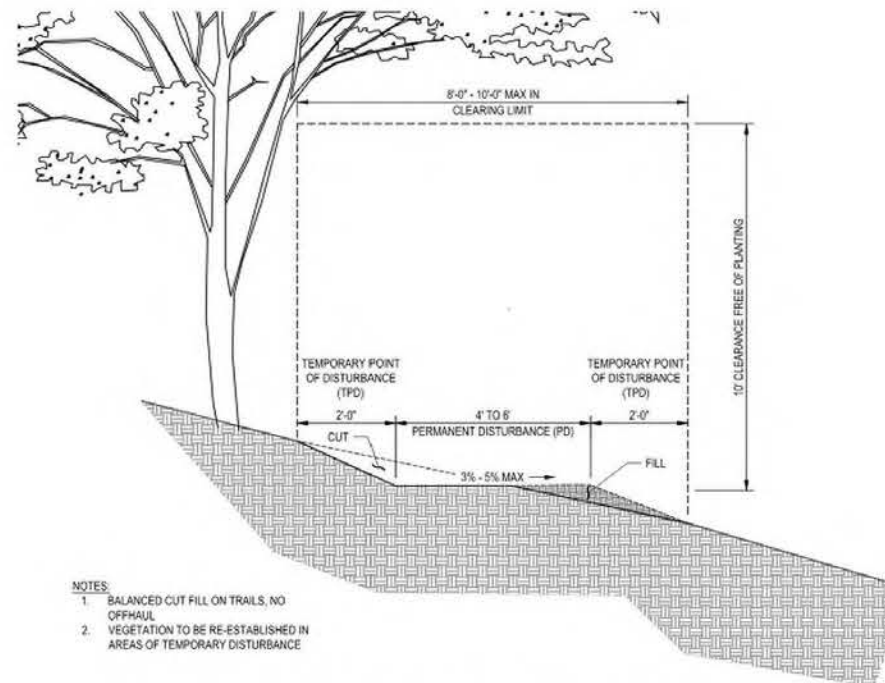


CUT RETAINING WALL



FILL RETAINING WALL

2 WOOD RETAINING WALL
NOT TO SCALE



- NOTES:
1. BALANCED CUT FILL ON TRAILS, NO OFFHAUL
 2. VEGETATION TO BE RE-ESTABLISHED IN AREAS OF TEMPORARY DISTURBANCE

3 MULTI USE, NATURAL SURFACE TRAIL
NOT TO SCALE

WOOD RETAINING WALL NOTES:

MATERIALS:

1. POSTS TO BE ROUGH DIMENSION DOUGLAS FIR #2 OR BETTER FREE OF HEART CENTER.
2. LAGGING TO BE DOUGLAS FIR #2 OR BETTER, ROUGH OR S4S. EACH LAGGING MEMBER SHALL BE BETWEEN 8" AND 12" NOMINAL IN DEPTH. DO NOT RIP INDIVIDUAL MEMBERS TO DEPTH LESS THAN 7".
3. POSTS AND LAGGING TO BE PRESSURE TREATED PER THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) CA-B WITH 0.21 PCF RETENTION OR AOC WITH 0.40 PCF RETENTION.
4. CONCRETE TO BE COMMERCIAL 5-SACK PRE-MIX CONCRETE OR EQUIVALENT.
5. CONNECT EACH LAGGING PLANK TO EACH POST WITH TWO (2) 3/8" DIAMETER CARRIAGE BOLTS OR LAG SCREWS WITH WASHERS. USE HOT-DIPPED GALVANIZED OR STAINLESS STEEL FASTENERS ONLY.
6. DRAIN ROCK TO BE 3/4" CLEAN UNGRADED WASHED GRAVEL OR CRUSHED ROCK.
7. SUBDRAIN FILTER FABRIC TO BE TENCATE GEOSYNTHETICS MRAF1 140N (HTTPS://WWW.TENCATEGEOSYN.US/EN-US/), US FABRICS 120NW (HTTPS://WWW.USFABRICSINC.COM/), OR EQUAL.

WORKMANSHIP:

8. LOCATE UNDERGROUND UTILITIES PRIOR TO DIGGING. CALL USA (UNDERGROUND SERVICE ALERT) 1-800-277-2600, MON THRU FRI 6AM TO 7PM. A MINIMUM 2 WORKING DAYS WITH A MAXIMUM 14 CALENDAR DAYS. TO OBTAIN A TICKET, CONTACT THE DISTRICT INSPECTOR OR PARK SUPERVISOR FOR DISTRICT UTILITIES NOT LOCATED BY USA.
9. TREATMENT OF FIELD CUTS AND DRILLED HOLES IN PRESSURE TREATED WOOD: CUT ENDS SHALL BE SPRAYED OR COATED LIBERALLY (MINIMUM 2 FULL BRUSH COATS) WITH COPPER NAPHTHENATE SOLUTION. DRILLED HOLES SHALL BE DIPPED FOR THREE MINUTES WHERE POSSIBLE, AND WHERE NOT POSSIBLE, SWABBED LIBERALLY SO AS TO PROVIDE EQUIVALENT TREATMENT THROUGHOUT THE LENGTH OF THE HOLE.
10. SECURE EACH POST PLUMB AT CENTER OF POST HOLE PRIOR TO PLACING CONCRETE OR SOIL BACKFILL. DO NOT ALLOW POSTS TO MOVE DURING INSTALLATION OR CURING.
11. WHERE NATIVE SOIL IS USED FOR BACKFILLING, REMOVE ALL ROCKS AND CLODS GREATER THAN 1.5" THEN COMPACT IN LIFTS OF 6".



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0 1"



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Author	M.Hight	Designer	M.Hight	
Drafting Check	L.Piper	Design Check	L.Piper	
Project Manager	L.Piper	Project Director	K.Vedula	

Client
EAST BAY REGIONAL PARKS DISTRICT

Project
Chouinard-Owen Public Access & Trail Project

Date
2025-11-12

Scale
AS SHOWN

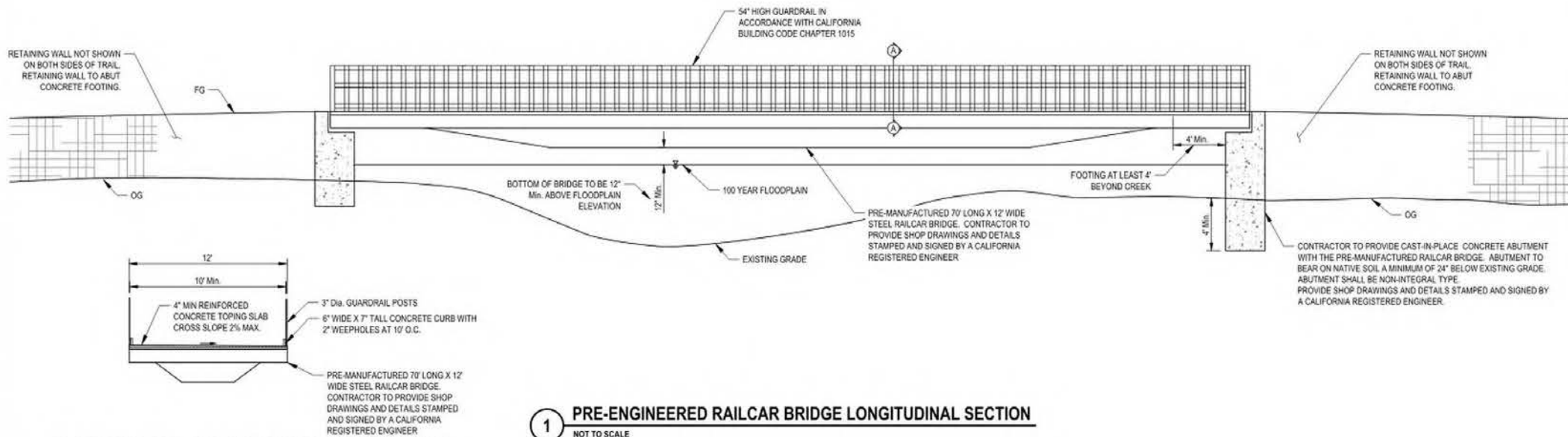
Project No.
12612075

Title
Retaining Wall Details

PRELIMINARY

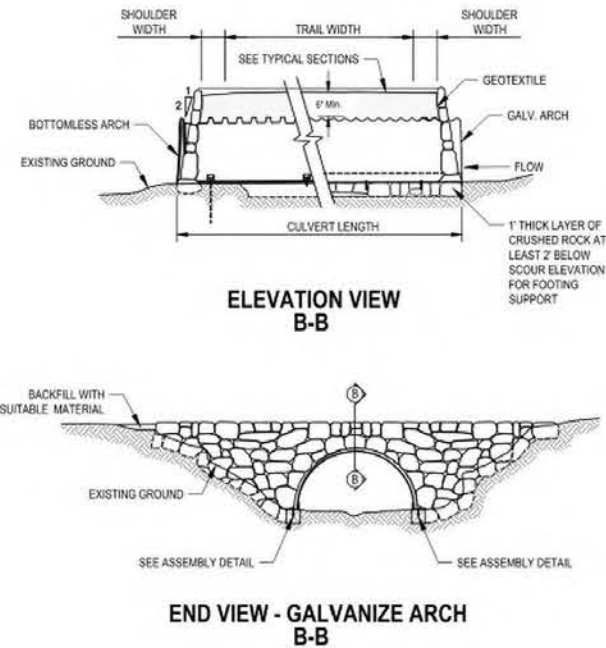
Sheet No.
L501

Sheet
13 of 17

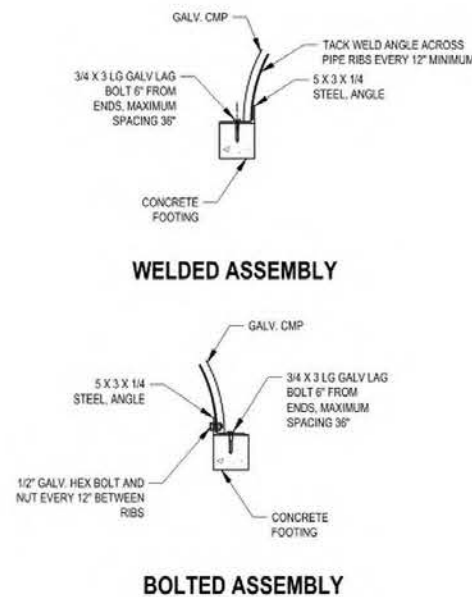


PRE-ENGINEERED RAILCAR BRIDGE CROSS SECTION A-A

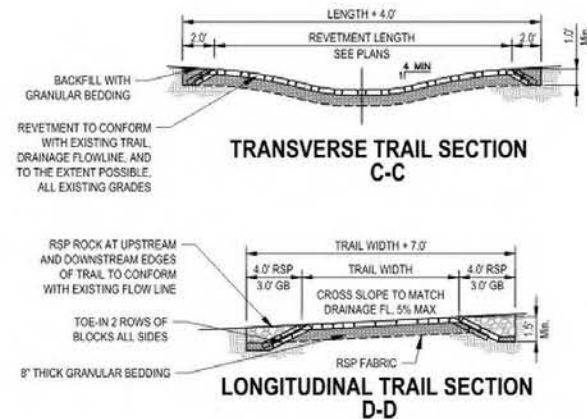
1 PRE-ENGINEERED RAILCAR BRIDGE LONGITUDINAL SECTION NOT TO SCALE



2 STEEL ARCH CULVERT NOT TO SCALE



3 ASSEMBLY DETAILS NOT TO SCALE



4 ARTICULATED BLOCK CROSSING NOT TO SCALE

STEEL OR CONCRETE ARCH CULVERT NOTES:

1. PRE-DRILL HOLES FOR REBAR TO PREVENT SPLITTING OF TREATED TIMBERS.
2. COMPACT BACKFILL IN 6" LIFTS UNTIL NO VISUAL DISPLACEMENT.
3. REMOVED AND DISPOSE OF DUFF AND TOP ORGANIC LAYERS DOWN TO MINERAL SOIL.
4. LAY ROCK WITH A MINIMUM OF 3 POINTS OF CONTACT WITH ADJACENT ROCKS.
5. LAY ROCKS IN A RANDOM ARRANGEMENT.
6. FILL VOIDS WITH BROKEN ROCK OR SUITABLE BACKFILL.
7. NO ROCKS LARGER THAN 1 1/2" WITHIN 12" OF PIPE.

ARTICULATED BLOCK CROSSING NOTES:

1. SITE-SPECIFIC PLANS SUPERSEDE NOTES AND DETAILS ON THIS STANDARD DETAIL SHEET.
2. REVIEW REGULATORY PERMITS AND MEET THE BIOLOGICAL MONITOR ON SITE PRIOR TO STARTING WORK.
3. PRECAST CONCRETE INTERLOCKING REVETMENT BLOCKS
 - 3.1. MINIMUM 4" THICK WITH NOMINAL WIDTH AND LENGTH DIMENSIONS OF 12" X 16".
 - 3.2. OPEN CELL DESIGN FOR THE PLACEMENT OF POROUS FILL.
 - 3.3. BLOCKS SHALL BE ARMORLOC 3510, CONTECH CONSTRUCTION PRODUCTS, INC. OR EQUAL.
4. RSP (ROCK SLOPE PROTECTION) FILTER FABRIC
 - 4.1. PERMEABLE, NONWOVEN, NEEDLE-PUNCHED GEOTEXTILE COMPLYING WITH CALTRANS CLASS 8.
 - 4.2. USE MIRAFI 180NC, US FABRICS 160NW, OR EQUAL.
5. RSP (ROCK SLOPE PROTECTION) ROCK
 - 5.1. ROCKS TO BE CLASS 1 (6") PER 2018 CALTRANS STANDARD SPECIFICATIONS SECTION 72.
 - 5.2. GRANULAR BEDDING AND BACKFILL MATERIAL (GB) SHALL HAVE 100% PASSING THE 1" SIEVE AND 90-100% PASSING THE 3/4" SIEVE. COMPACTED 3/4" CALTRANS CLASS 2 AB MAY ALSO BE USED FOR GB.
6. GRADING
 - 6.1. EXCAVATE TO GRADES, DIMENSIONS AND DEPTHS NOTED. DO NOT OVER-EXCAVATE DEPTH EXCEPT AS REQUIRED TO REMOVE LOOSE UNCONSOLIDATED MATERIALS. IN WHICH CASE, INCREASE THE BEDDING THICKNESS TO REACH FINAL GRADES.
 - 6.2. BOTTOM OF EXCAVATION SHALL BE SMOOTH AND FIRM FOR INSTALLATION OF FILTER FABRIC.
 - 6.3. DISPOSE OF EXCAVATED MATERIAL BY COMPACTING ONTO EXISTING DISTURBED TRAIL AREAS AWAY FROM ORANGE AREAS.
7. INSTALL FILTER FABRIC PER MANUFACTURER'S GUIDELINES. PROVIDE A MINIMUM 24" OVERLAP AT SPLICES AND REPLACE DAMAGED FABRIC BEFORE PLACING BEDDING.
8. GRANULAR BACKFILL AND BEDDING SHALL BE WELL CONSOLIDATED WITH A FIRM REGULAR SURFACE, CLASS 2 AB, IF USED, SHALL BE COMPACTED WITH MECHANICAL EQUIPMENT.
9. CONCRETE BLOCKS SHALL BE CAREFULLY PLACED TO PROVIDE A UNIFORM SURFACE PER MANUFACTURER'S RECOMMENDATIONS.



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Author	M.Hight	Designer	M.Hight	
Drafting Check	L.Piper	Design Check	L.Piper	
Project Manager	L.Piper	Project Director	K.Vedula	

Client
EAST BAY REGIONAL PARKS DISTRICT

Project
Chouinard-Owen Public Access & Trail Project

Date
2025-11-12

Scale
AS SHOWN

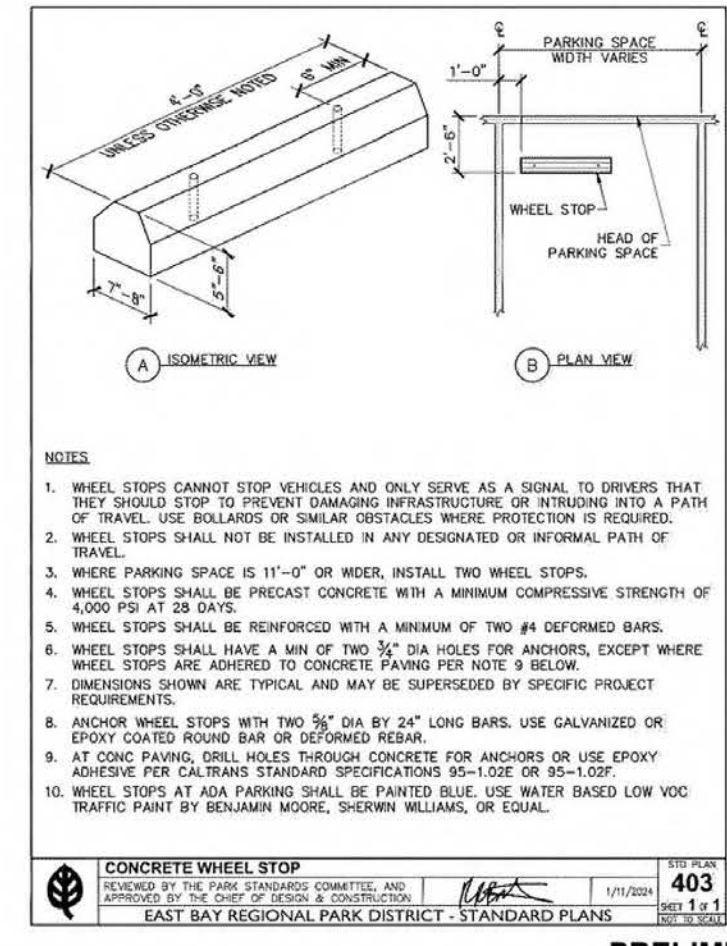
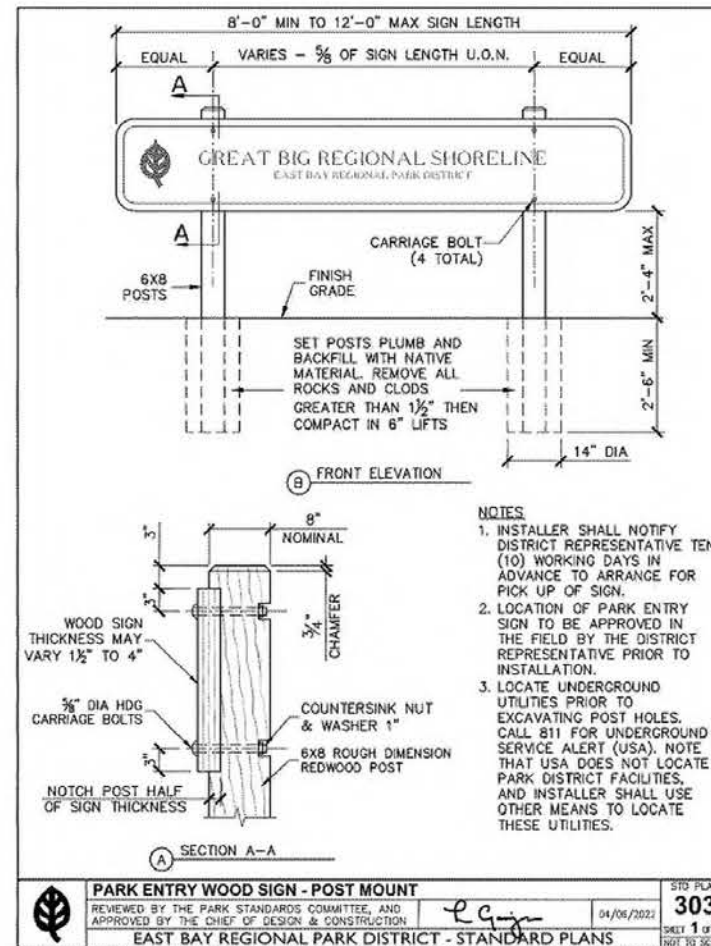
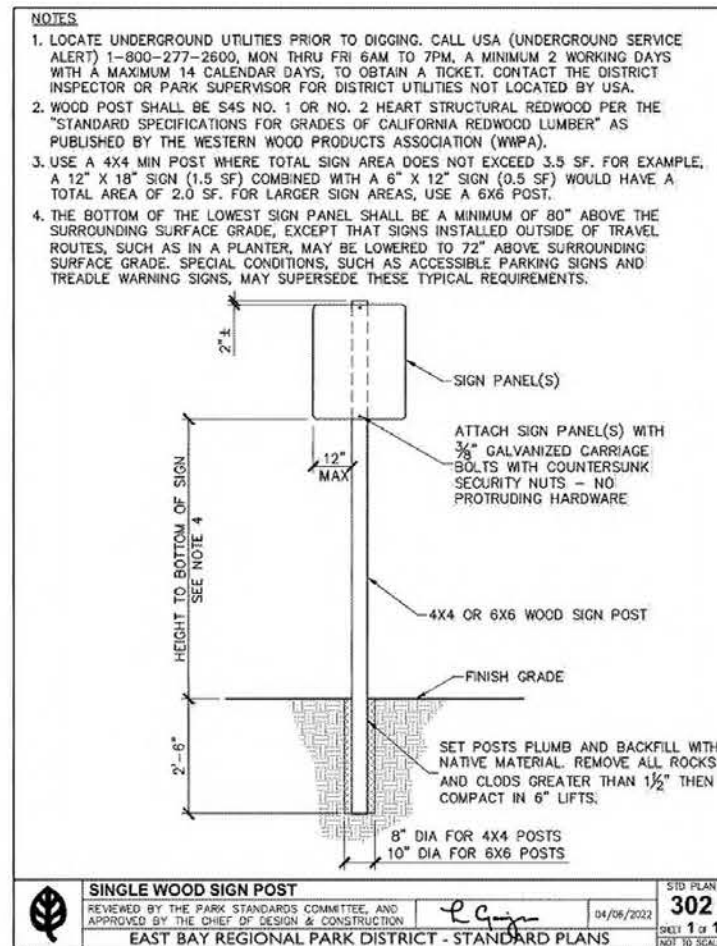
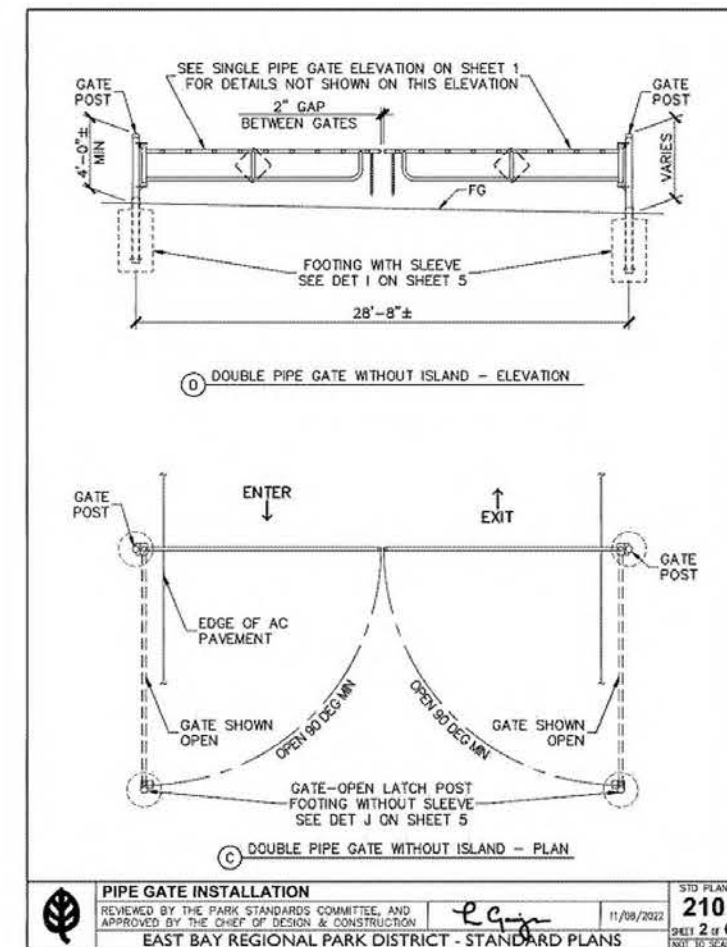
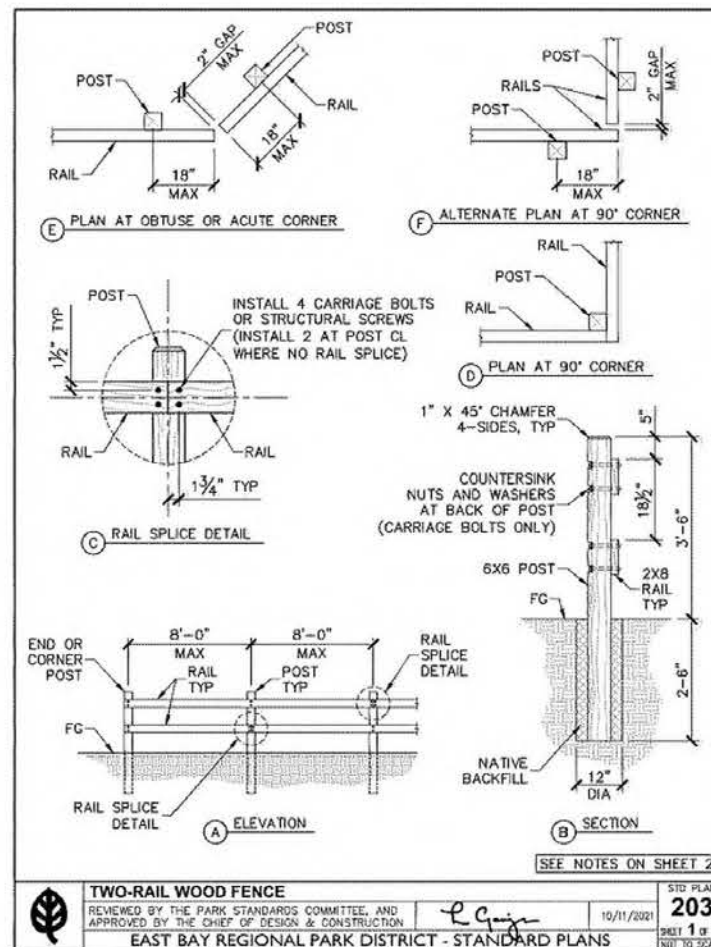
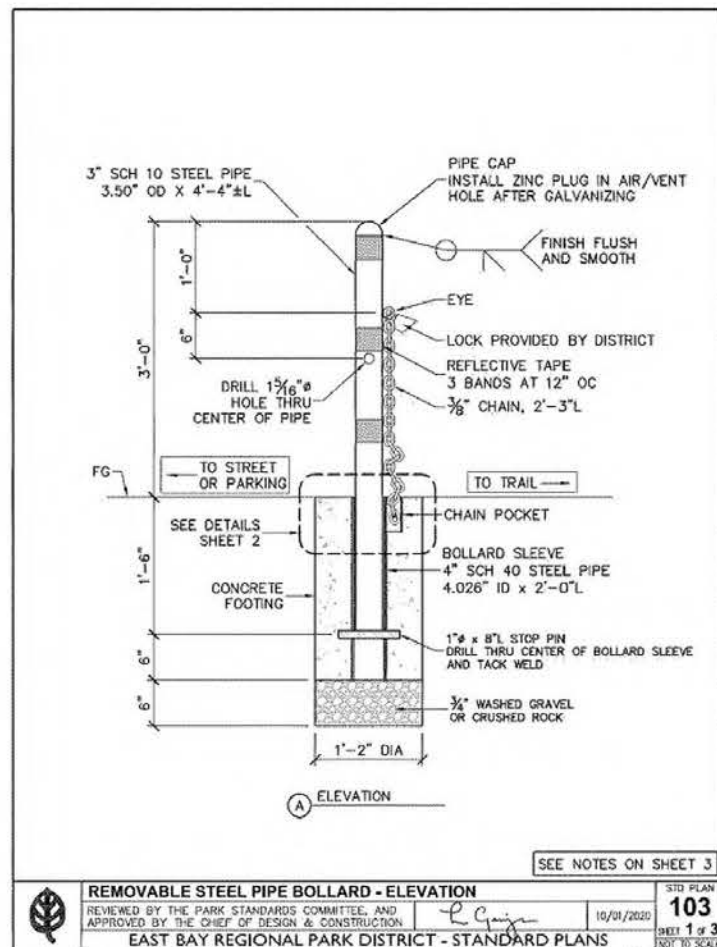
Project No.
12612075

Title
Water Crossing Details

PRELIMINARY

Sheet No.
L502

Sheet
14 of 17



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East Bay Regional Park District

No.	Issue	Checked	Approved	Date
Author	L.Piper	Designer	T.Hemel	
Drafting	L.Piper	Design	L.Piper	
Check		Check		
Project	L.Piper	Project	K.Vedula	
Manager		Director		

EAST BAY REGIONAL PARKS DISTRICT

Chouinard-Owen Public Access & Trail Project

Date: 2025-11-12 Scale: AS SHOWN

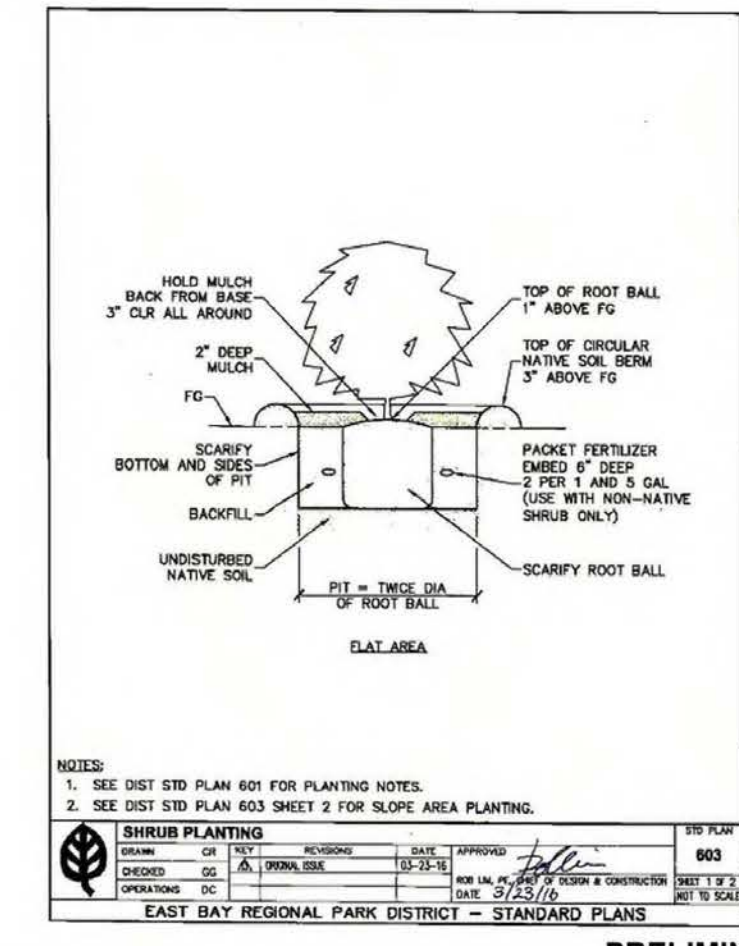
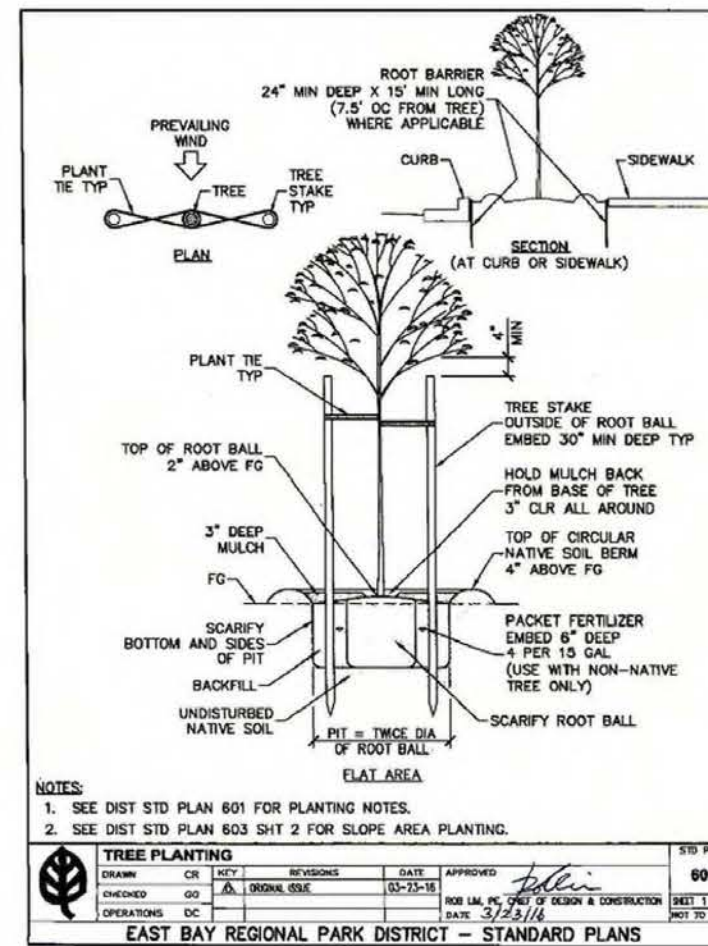
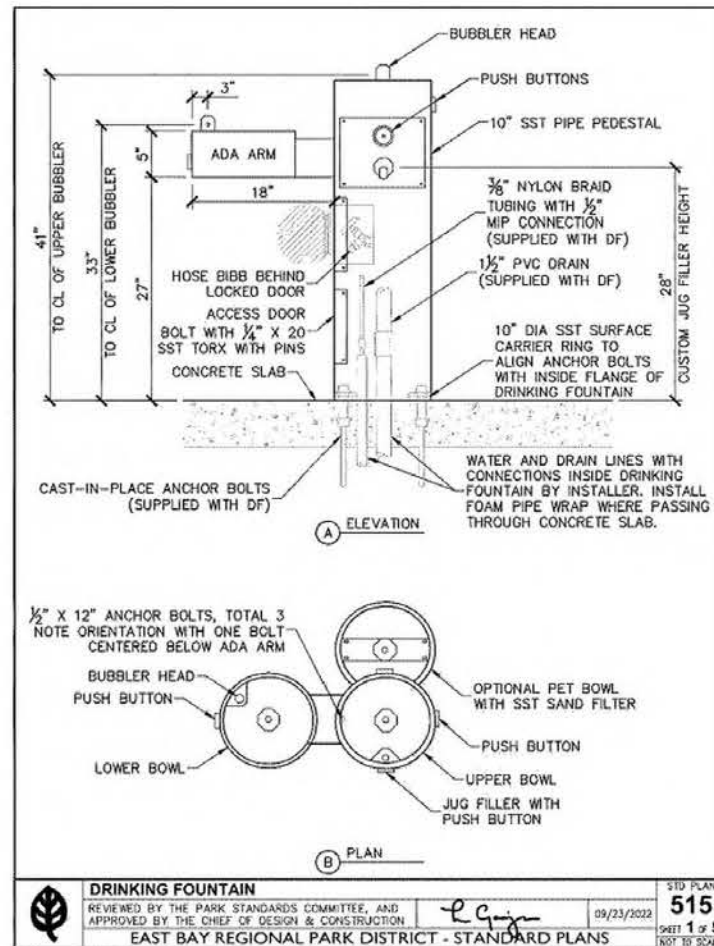
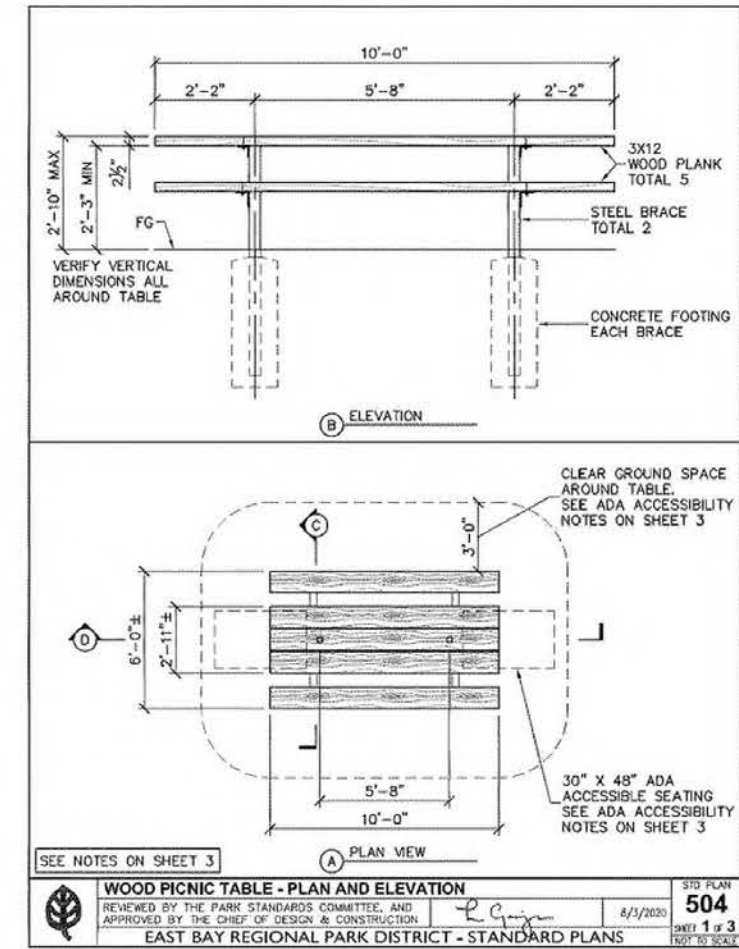
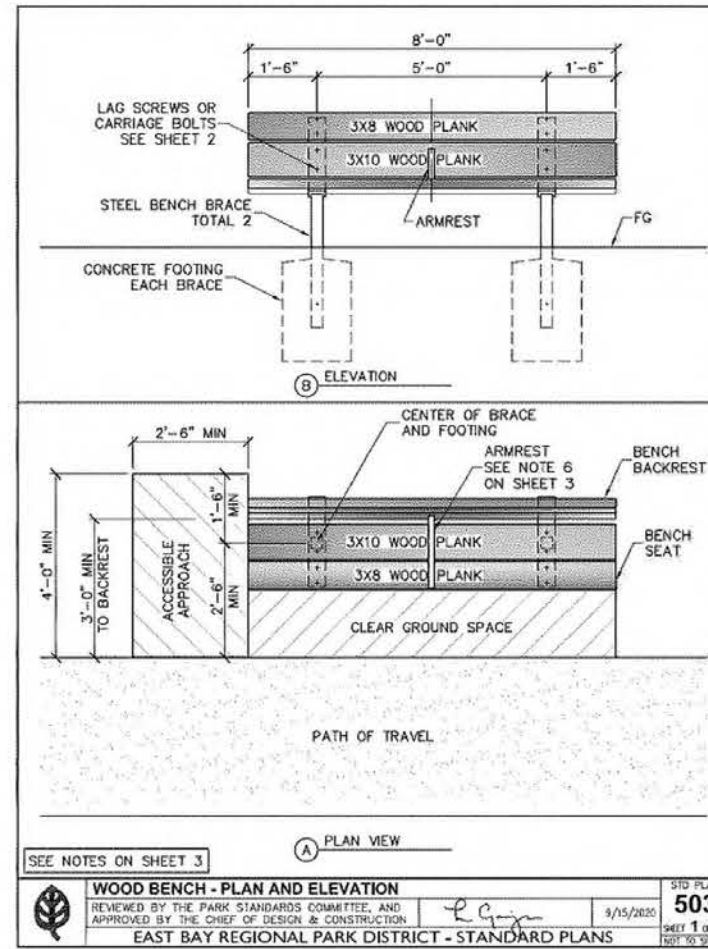
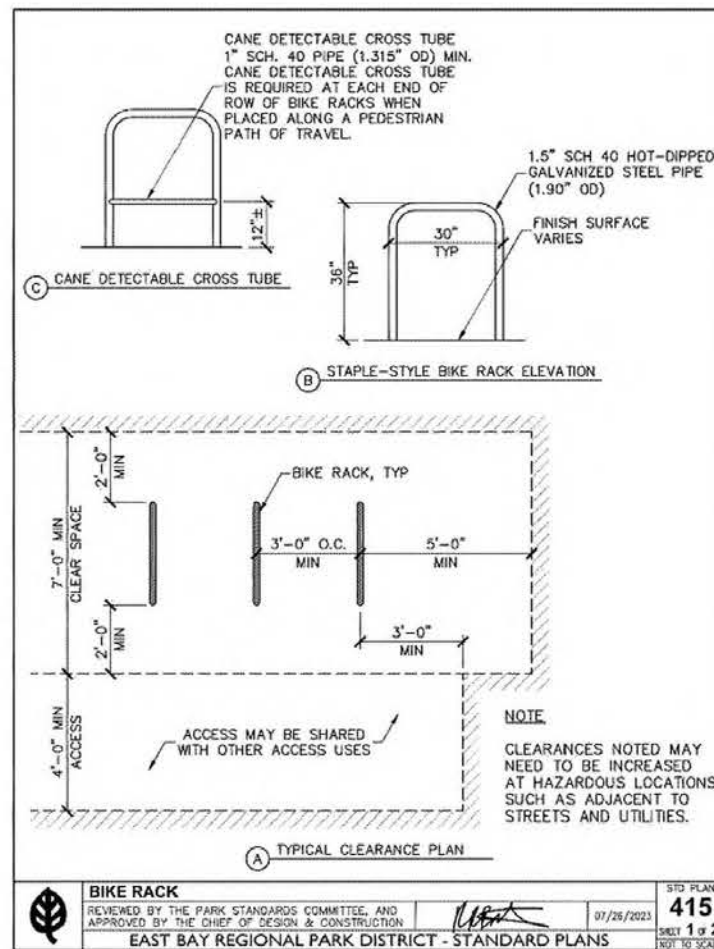
Project No: 12612075

Title: Public Access Area Details (1 of 3)

Sheet No: L503

PRELIMINARY

Sheet 15 of 17



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Drafting	L.Piper	Design	L.Piper	
Check		Check		
Project	L.Piper	Project	K.Vedula	
Manager		Director		

EAST BAY REGIONAL PARKS DISTRICT

Chouinard-Owen Public Access & Trail Project

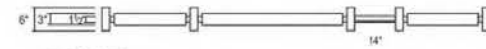
Date	2025-11-12	Scale	AS SHOWN
Project No.	12612075		

Public Access Area Details (2 of 3)

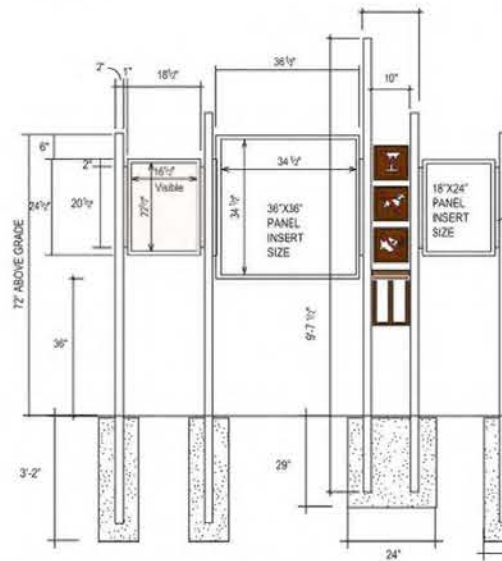
PRELIMINARY

Sheet No. L504
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Info Panel
IP3.3
3 Windows
3 Symbol panels
Optionally double-sided
Optional bulletin cases
Brochure rack options
Powdercoated Aluminum Structure
Graphic Panels Provided by EBRPD
Packaged and delivered to EBRPD
unassembled.
Optional Installation by Fabricator
Aluminum is powder coated:
EBRPD Dark Brown
Leaf is applied vinyl:
Oracal Beige



2 TOP VIEW



1 FRONT ELEVATION-IP03.3 SHOWN, DETAILS ARE TYPICAL

ALUMINUM STRUCTURE IS
POWDER COATED ON ALL
SURFACES INCLUDING
INTERIORS OF DISPLAY
FRAMES

DOUBLE SIDED FRAME AND
PANEL SYSTEM IS CUSTOM
FABRICATED USING EAGLE
MOULDINGS EAM-555
ALUMINUM EXTRUSION

OPTIONAL 18X24 BULLETIN
CASE IF SPECIFIED TO BE
PROVIDED BY HOPEWELL MFG
OR APPROVED SUB.

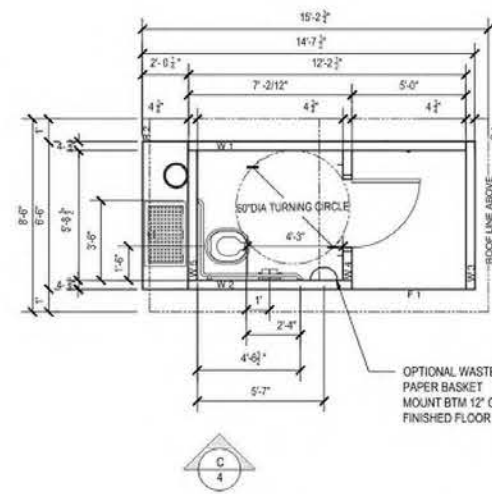
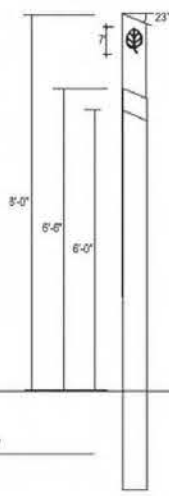
SPACERS ARE 1X1.5" RECT.
ALUMINUM TUBE. TOPS AND
BOTTOMS ARE CAPPED,
ALUMINUM CAPS ARE WELDED
OR ADHERED TO BE
PERMANENT

ENGINEERED DRAWINGS AND
ALTERNATE PAD FOOTING
SPECIFICATIONS ARE
AVAILABLE.

VERTICAL SUPPORTS AREA 2" X 6" X 125"
WALL RECT. ALUMINUM TUBE WITH EASED
CORNERS

TOPS OF SUPPORTS ARE CAPPED, EDGES
ARE WELDED, FILLED, GROUND AND
FINISHED TO BE FEATURELESS

LOGO IS APPLIED VINYL ON BOTH SIDES OF
TALL SUPPORT ONLY



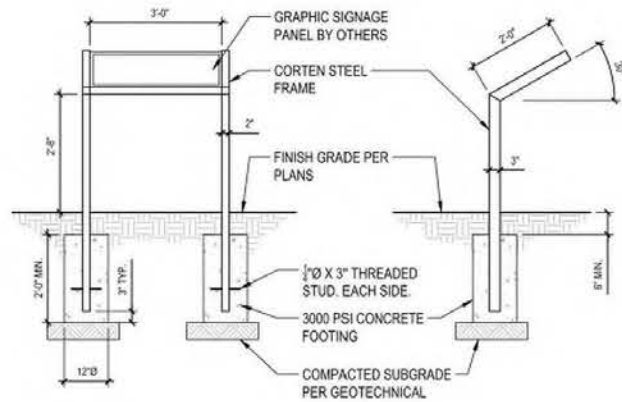
FLOOR PLAN



1 INFO PANEL

NOT TO SCALE

P-EB-80

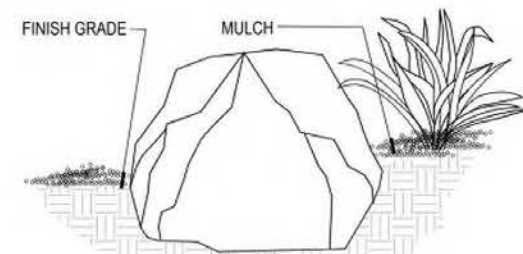


2 INTERPRETIVE SIGNAGE MOUNTS

1/2" = 1'-0"

P-EB-86

PLACE BOULDER INTO THE GROUND APPROXIMATELY 1/3 OF THE BOULDER'S
SIZE. AVOID THE "PILE OF ROCKS" LOOK ASSOCIATED WITH DUMPING
BOULDERS.



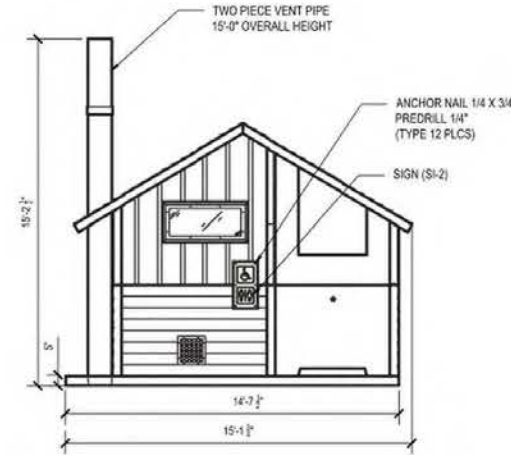
3 TYPICAL BOULDER PLACEMENT

NOT TO SCALE

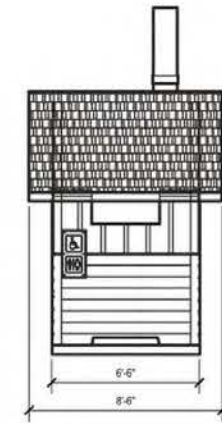
4 PRE-FAB SINGLE STALL VAULT TOILET BUILDING

NOT TO SCALE

P-EB-79



C FRONT ELEVATION



D RIGHT SIDE ELEVATION

East Bay
Regional Park District

No.	Issue	Checked	Approved	Date
1	Author	L.Piper	Designer T.Hessel	
2	Drafting	L.Piper	Design	L.Piper
3	Check	L.Piper	Check	L.Piper
4	Project	L.Piper	Project	K.Vedula
5	Manager	L.Piper	Director	K.Vedula

EAST BAY REGIONAL PARKS
DISTRICT

Chouinard-Owen Public
Access & Trail Project

Date	Scale
2025-11-12	AS SHOWN

Project No.
12612075

Public Access Area
Details (3 of 3)

Appendix B

Park District Trail Construction & Trail Modification BMPs

TRAIL CONSTRUCTION & TRAIL MODIFICATION BEST MANAGEMENT PRACTICES (BMPs)

Following are best management practices that will be employed to minimize adverse impacts to the parkland environment during trail construction, modification and/or restoration activities, as appropriate:

- Develop trails to contour alongside slopes (not the fall line of a slope) as fall-line trails become watercourses, erode easily and then are difficult to maintain. Contour trails should be cut on a full bench, rather than a combination of cut and fill. The cut material should be broadcast downslope, unless the trail is near a creek. Cut material can also be utilized for the ramp section of rolling dips if it is compacted one layer at a time.
- Out-slope trails in most cases (except for short sections at outside bends) to encourage water to run off the side of the trail, rather than along the trail. Trails should be built to have about 3 to 5 percent outslope after trail compaction has occurred, so initial out-sloping should be greater than 5 percent. After a year or two, it should be expected that maintenance would be needed to return and “de-berm” sections of trail where soil compaction and displacement have exceeded the outsloping.
- Incorporate rolling dips (grade reversals 12 to 20 feet long) that avoid the short and abrupt style of traditional “water bars” into a trail where they will enhance natural grade dips (as a backup to out-sloping) to avoid water flow along a trail.
- Locate the outside bend of a trail at a relative high point to help reduce erosion; a reduction in erosion is achieved because the upslope naturally slows a bicycle rider, which reduces the need to brake or skid, which can displace sediments on the trail surface.
- Locate climbing turns or switchbacks whenever possible where the side-slope is 10 percent or less, in order to create a sustainable, low-erosion trail. The actual trail gradient should be determined by site geology and terrain. The wider the turn and the lower the slope of the turn itself, the less braking and skidding (going downhill) is needed, and less wheel spinning (going uphill) is likely.
- Reduce locations where bicycles tend to brake heavily and or have to climb steep hills, which could cause erosion. Make a conscious effort to design trails with consistent “flow” (IMBA), 2004). Exaggerate grade reversals at outside bends. Gradual flow transitions should also reduce user conflicts.
- If landslides or slope failures occur, cut a temporary ramp through the edge of the scarp, have the trail traverse across the slide, and then cut another ramp to go up the scarp on the other side to reduce the tendency for users to create unsanctioned trails around the head of the landslide scarp.
- Close trails in areas with active landslides and highly erodible soils during wet weather and storm events.
- Maintain the trail corridor by trimming encroaching vegetation to keep trail in a safe and operable condition thereby encouraging users to stay within the constructed trail bed.
- Conform trail approaches as they intersect with other trails to reduce water collection at the junction and moderate the speed of trail users.
- Minimize disturbance to the soil surface to reduce erosion and maintenance problems; minimized trail widths to reduce the amount of bare soil subject to erosion and produce less concentrated runoff than wider trails (with all other factors being equal).
- Prepare specific erosion control plans as part of the trail construction documentation for new trail alignments. Criteria to be used in determining the erosion potential and developing the plan include: slope; soil type; soil composition and permeability; and the relative stability of the underlying geologic unit.

- Incorporate erosion- and sediment-control measures where trails are located in riparian zones to minimize the mobilization of sediment to creeks and other water bodies including:
 - Using paving stones or other rock work (to armor the trail surface).
 - Providing settling areas for trail drainage where water can infiltrate and sediment can settle out.
 - Constructing creek crossings so that they do not greatly alter the cross-sectional shape of the channel or floodplain.
 - Sloping the approach to a creek or drainage crossing downward toward the creek and then climbing upward when traveling away from the creek drainage bed, so that in the event of a blockage in the channel, the creek water would not be diverted to flow along the trail.
 - Enclosing and covering exposed stockpiles of dirt or other loose, granular construction materials that could contribute sediment to waterways.
 - Containing soil and filtering runoff from distributed areas by berms, vegetated filters, silt fencing, straw wattles, plastic sheeting, catch basins, or other means necessary to prevent the escape of sediment from disturbed areas.
 - Prohibiting the placement of earth or organic material where it may be directly carried into a stream, swale, ditch, marsh, pond, or body of standing water.
 - Prohibiting the following types of materials from being rinsed or washed into waterways: concrete, solvents and adhesives, fuels, dirt, gasoline, asphalt, and concrete saw slurry.
 - Only conducting dewatering activities with implementation of proper construction water quality control measures in place.
- Use rock drains and gravel surfaces where trails cross seep areas to minimize potential for trail users to bypass the soggy area in ever-increasing arcs. Use soil amendments such as sand, crushed rock, or gravel to make a trail less prone to compaction and displacement; amendments can also help the tread drain better.
- Limit the source of water for horse troughs to seeps, springs and existing water lines; do not divert water from creeks or other waterways.
- Abandon, obliterate and restore trails where it has been determined that the trail would be a significant risk to park resources or safety of the park users. In these cases, the decommissioned trail will be:
 - Blocked with local native vegetation materials such as limbs, logs, rocks and brush (or fencing) that will be placed in such a way as to create obstacles for the trail user
 - Rehabilitated by filling and reshaping the former trail surface to blend with the natural contours. If soil compaction has occurred, the soil will be scarified and aerated.
 - Revegetated by planting native vegetation, transplanted from the vicinity, or seeded with native species found in the area.
 - Posted “*not a trail, habitat restoration taking place.*”

Once the obliteration and restoration has been completed, the decommissioned trail should be totally obscured, present a difficult and uncomfortable route to the potential trail user, and, if possible, the view of the trail blocked from a designated trail.

Appendix C

Construction Emissions Calculations

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Garin to Pleasanton Ridge Public Access Project
Construction Start Date	3/4/2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30000
Precipitation (days)	24.2000
Location	33853 Palomares Rd, Castro Valley, CA 94552, USA
County	Alameda
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1628
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.43

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Non-Asphalt Surfaces	6.00000	1000sqft	0.13774	0.00000	31,107.0	0.00000	—	Gravel Parking Lot

Road Construction	0.50000	Mile	0.75000	0.00000	—	—	—	Half-mile compacted Earth Trail
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.92772	22.4046	33.0712	0.06469	0.89569	4.04946	4.94515	0.82405	0.48023	1.30429	7,325.48	0.28864	0.06280	7,352.27
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.86474	30.0384	42.7258	0.08052	1.23804	9.42340	10.6614	1.13901	3.06332	4.20233	9,071.69	0.36108	0.12612	9,107.40
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28185	2.18600	3.20577	0.00625	0.08582	0.41137	0.49718	0.07896	0.06031	0.13928	705.273	0.02811	0.00716	708.150
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05144	0.39894	0.58505	0.00114	0.01566	0.07507	0.09074	0.01441	0.01101	0.02542	116.766	0.00465	0.00119	117.242

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Appendix D

Biological Resources Technical Report



Biological Resources Technical Report

Garin to Pleasanton Ridge Public Access Project

Union City, Alameda County, California



Prepared for:

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November 2024; REVISED April 2025

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WRA#31253-2

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List of Acronyms

ACWD	Alameda County Water District
AWS	Alameda whipsnake
BMP	Best Management Practices
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGF	California Fish and Game Code
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Corps	U.S. Army Corps of Engineers
CRLF	California Red Legged Frog
CWA	Clean Water Act
EACCS	East Alameda County Conservation Strategy
EBRPD	East Bay Regional Parks District
EFH	Essential Fish Habitat
ESA	Federal Endangered Species Act
FYLF	Foothill yellow-legged frog
Inventory	California Native Plant Society Rare Plant Inventory
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Plan
NMFS	National Marine Fisheries Service
NCCP	Natural Community Conservation Plan
NPPA	California Native Plant Protection Act
OHWM	Ordinary High Water Mark
Rank	California Rare Plant Ranks
RHA	Rivers and Harbors Act
RWQCB	Regional Water Quality Control Board
SWRCB	State Water Resource Control Board
TOB	Top of Bank
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group
WPT	Northwestern pond turtle
WRA	WRA, Inc.



1.0 INTRODUCTION

This Biological Resources Technical Report evaluates existing biological resources and provides an analysis of potential impacts and proposed mitigation measures for the proposed Garin to Pleasanton Ridge Public Access Project (Project) located in Union City and unincorporated Alameda County, California (**Appendix A – Figure 1**). The purpose of the Project is to create a new trail connection that would increase public access within the open parklands in Pleasanton Ridge. Project elements involve the creation of a new trail segment and realignment of an existing trail with associated crossings needed to ensure safe pedestrian access.

1.1 Overview and Purpose

This report provides an assessment of biological resources within the Project footprint and immediate vicinity, as relevant (Study Area; **Appendix A – Figure 2**). The assessment included a formal wetland delineation and three protocol level rare plant surveys. The purpose of the assessment was to develop and gather information on sensitive land cover types and special-status plant and wildlife species to support an evaluation of the Project under the California Environmental Quality Act (CEQA). This report describes the results of several site visits, which assessed the Study Area for (1) the presence of sensitive land cover types, special-status plant species, and special-status wildlife species, and (2) the potential for the site to support special-status plant and wildlife species. Based on the results of the site assessment, potential impacts to sensitive land cover types and special-status species resulting from the proposed Project were evaluated. If the Project has the potential to result in significant impacts to these biological resources, measures to avoid, minimize, or mitigate for those significant impacts are described.

This assessment is based on information available at the time of the study and on-site conditions that were observed on the dates the site was visited. Conclusions are based on currently available information used in combination with the professional judgement of the biologists completing this study.

1.2 Project Description

The Garin to Pleasanton Ridge Public Access Project (Project) will create a regional trail connection that would increase public access across the landscape. The proposed trail connection would ultimately allow public access to the 955-acre Owen landbank property in Pleasanton Ridge and the 10-acre Chouinard landbank property, currently owned by the East Bay Regional Parks District (EBRPD). This will be accomplished by developing an access point with trailhead amenities located at the Chouinard property, re-aligning a portion of the existing Stonybrook Trail that meanders through riparian areas, constructing a new Chouinard Trail, and providing a safe, at-grade crossing of Palomares Road. The Project would incorporate selected, existing ranch roads within the Owen property in Pleasanton Ridge into a public trail network that connects to the open parklands in Pleasanton Ridge.

In addition to the creation and realignment of trail segments, the Project will include the following elements to further facilitate safe access at the site:

- Install an arch culvert with open bottom along the Stonybrook Trail re-alignment;
- Perform minimal maintenance to existing armored ford crossings along the Stonybrook Trail;



- Install articulated block at low-flow crossings along the new Chouinard Trail alignment using a precast concrete interlocking revetment block system; and
- Replace an existing washed-out culvert with a new span crossing at the start of the Chouinard Trail on the Chouinard property.

The proposed trail alignment will span approximately 1-mile and cover less than one acre in total area. The trail will be designed to be approximately six-foot wide on average, with adjacent grading that could result in additional temporary disturbance on either side. Temporarily disturbed areas will be restored following construction of the trail.

All work within stream channels will be limited to the dry season (June 1 through October 31), when flowing water is not present, to minimize any potential impacts to aquatic species and their habitats. Existing ranch roads will provide access to the areas of construction. Equipment will be staged in adjacent developed portions of the Chouinard property.

Given that the trail design will incorporate existing ranch roads, utilize salvaged boulders for trail retention purposes, and preserve surrounding habitat to the greatest extent possible during trail construction, post-construction conditions will be similar to pre-construction conditions with the addition of safe creek crossings and improved pedestrian access.



Table 1: Summary of Biological Resources Evaluation

CEQA Assessment Category ¹ IV – Biological Resources	Biological Resources Considered	Relevant Laws & Regulations	Responsible Regulatory Agency	Summary of Findings & Report Section ²
Question A. Special-status Species	Special-status Plants Special-status Wildlife Designated Critical Habitat	Federal Endangered Species Act CA Endangered Species Act CA Native Plant Protection Act Migratory Bird Treaty Act Bald & Golden Eagle Protection Act	U.S. Fish & Wildlife Service National Marine Fisheries Service CA Department of Fish & Wildlife	Potentially significant impacts were identified and mitigation measures are included that reduce those impacts to a level that is less than significant. See Section 7.1 for more information.
Question B. Sensitive natural communities & riparian habitat	Sensitive Natural Communities Streams, Lakes & Riparian Habitat	CA Fish & Game Code Oak Woodland Conservation Act Porter-Cologne Act Clean Water Act	CA Department of Fish & Wildlife U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board Regional Water Quality Control Board	Potentially significant impacts were identified and mitigation measures are included that reduce those impacts to a level that is less than significant. See Section 7.2 for more information.
Question C. State and federally protected wetlands	Wetlands Unvegetated surface waters	Clean Water Act: Sections 404/401 Porter-Cologne Act	U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board Regional Water Quality Control Board	Potentially significant impacts were identified and mitigation measures are included that reduce those impacts to a level that is less than significant. See Section 7.3 for more information

¹ CEQA Questions have been summarized here, see Section 6.2 for details.

² As given in this report, see Section 7.0 subheadings.



Table 1: Summary of Biological Resources Evaluation

CEQA Assessment Category ¹ IV – Biological Resources	Biological Resources Considered	Relevant Laws & Regulations	Responsible Regulatory Agency	Summary of Findings & Report Section ²
Question D. Fish & wildlife corridors	Essential Fish Habitat Wildlife Corridors	CA Fish & Game Code Magnuson-Stevens Fishery Conservation & Management Act	CA Department of Fish and Wildlife National Marine Fisheries Service	No potentially significant impacts were identified and mitigation is not required. See Section 7.4 for more information
Question E. Local policies	Protected Trees Other biological protections	County Tree Ordinance Union City Tree Ordinance Union City General Plan (e.g. Stream & Wetland Setbacks) Local ordinances	Local and regional agencies	No potentially significant impacts were identified and mitigation is not required. See Section 7.5 for more information
Question F. Local, state, federal conservation plans	Habitat Conservation Plans Natural Community Conservation Plans	Federal Endangered Species Act Natural Community Conservation Planning Act	U.S. Fish and Wildlife Service CA Department of Fish and Wildlife	No potentially significant impacts were identified and mitigation is not required. See Section 7.6 for more information



2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential Project impacts. Table 1 shows the correlation between these regulations and each Biological Resources question in the Environmental Checklist Form (Appendix G) of the CEQA guidelines.

2.1 Federal and State Regulatory Setting

2.1.1 Vegetation and Aquatic Communities

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Wildlife (CDFW) and aquatic features protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). The laws and regulations that provide protection for these resources are summarized below.

Sensitive Natural Communities: Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2023a) and keeps records of their occurrences in its California Natural Diversity Database (CNDDDB; CDFW 2023b). Natural communities are ranked 1 through 5 in the CNDDDB based on NatureServe's (2023) methodology, with those communities ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (California Code of Regulations [CCR] Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Conservation Act and Section 21083.4 of California Public Resources Code.

Waters of the United States, Including Wetlands: The Corps regulates "Waters of the United States" under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands that are hydrologically connected with these navigable features (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.

The Corps also regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 U.S. Code [USC] 403). Section 10 of the RHA



requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

Waters of the State, Including Wetlands: The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

Sections 1600-1616 of California Fish and Game Code: Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGF). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement (LSAA). The term “stream,” which includes creeks and rivers, is defined in the CCR as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). The term “stream” can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 LSAA from CDFW.

2.1.2 Special-status Species

Endangered and Threatened Plants, Fish, and Wildlife. Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species’ designation under one law does not automatically provide protection under the other.

The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as “listed species”). “Proposed” or “candidate” species are those that are being considered for listing and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to



take of any listed species. “Take” under the ESA is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance, and impacts to habitat for listed species. Actions that may result in take of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features “essential to the conservation of the species.” Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (CFGF 2050 et seq.) prohibits the take of any plant and animal species that the CFGF determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species that are proposed for listing as threatened or endangered under CESA. The definition of a “take” under CESA (“hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

Fully Protected Species and Designated Rare Plant Species. This category includes specific plant and wildlife species that are designated in the CFGF as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGF. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of “take” is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 “rare” or “endangered” plant species, and prevents “take”, with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

Special Protections for Nesting Birds and Bats. The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America’s eagle species [bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*)] that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act (MBTA) of 1918 and CFGF, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.



Essential Fish Habitat. The Magnuson-Stevens Fishery Conservation and Management Act provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat (EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of fisheries, which may include the water column, certain bottom types, vegetation (e.g., eelgrass (*Zostera* spp.)), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

Species of Special Concern, Movement Corridors, and Other Special-status Species under CEQA. To address additional species protections afforded under CEQA, CDFW has developed a list of special species as “a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status.” This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Rare Plant Inventory (Inventory; CNPS 2023a) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a Rank of 3 or 4, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 and Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Some species listed in the *Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties (web application)* (Lake 2023) are considered sensitive (see Section 2.2). Additionally, any species listed as sensitive within local plans, policies and ordinances are likewise considered sensitive. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

2.2 Local Plans and Policies

A portion of the Study Area is within Union City, with the remainder in unincorporated Alameda County.

Rare, Unusual, and Significant Plants of Alameda and Contra Costa Counties. *Rare, Unusual, and Significant Plants of Alameda and Contra Costa Counties (web application)* (Lake 2023) is a database produced by the East Bay Chapter of the CNPS that lists plant taxa which are considered locally rare, unusual, or significant in Alameda and Contra Costa counties. Taxa are assigned rankings of A, B, or C to indicate their degree of rarity or endangerment in the two counties. See Table 2 for a description of each of the rankings. A-ranked taxa receive consideration under sections 15380 and 15125(a) of CEQA and are considered “locally rare” for the purposes of this report. Any locally rare taxa observed in the Study Area are discussed in this report.



Table 2. Description of East Bay CNPS Locally Rare Plant Rankings

Rank	Description
A1	Locally Rare Species. Species occurring in two or fewer regions in Alameda and Contra Costa counties
A1x	Locally Rare Species. Species presumed extirpated from Alameda and Contra Costa counties
A1?	Locally Rare Species. Species possibly occurring in Alameda and Contra Costa counties. Identification or location is uncertain
A2	Locally Rare Species. Plants occurring in three to five regions or are otherwise threatened in Alameda and Contra Costa counties.
B	High Priority Watch List. Plants occurring in six to nine regions in Alameda and Contra Costa counties.
C	Second Priority Watch List. Plants occurring in ten to fifteen regions in Alameda and Contra Costa counties.

*Ranks preceded by an asterisk (e.g., “*A1”) also have a statewide rarity ranking

East Alameda County Conservation Strategy. The entirety of the Study Area is located in Conservation Zone 10 of the East Alameda County Conservation Strategy (EACCS; ICF 2010). The EACCS is intended to provide an effective framework to protect, enhance, and restore natural resources in eastern Alameda County, while improving and streamlining the environmental permitting process for impacts resulting from infrastructure and development projects. The EACCS includes provisions for “focal species”—species that are protected under federal and state laws. The goal is to protect and enhance the habitats of these species. Although the EACCS is a framework for guidance by regulatory agencies and does not include incidental take permits for threatened or endangered species similar to those provided by a Habitat Conservation Plan, the USFWS issued a Programmatic Biological Opinion in 2012 for Corps permitted projects utilizing the EACCS (Corps File No.: 2011-00230S). The Programmatic Biological Opinion offers a streamlined permitting process with the USFWS for projects considered suitable to be appended.

Alameda County Tree Ordinance. The Alameda County Tree Ordinance may require a permit to perform various activities on or associated with trees in the County right-of-way in unincorporated Alameda County. Such activities include, but are not limited to, removal, planting, certain types of cutting, and installation of infrastructure.



3.0 ASSESSMENT METHODOLOGY

On May 4 and June 1, 2023, and August 8, 2024, WRA, Inc. (WRA) biologists visited the Study Area to map vegetation, aquatic features, and other land cover types; document plant and wildlife species present; and evaluate on-site habitat for the potential to support special-status species as defined by CEQA. Prior to the site visits, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive land cover types and special-status species, including the following:

- Soil Survey of Alameda Area, California (USDA 1966)
- Dublin 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2021)
- Contemporary aerial photographs (Google Earth 2024)
- Historical aerial photographs (NETR 2023)
- National Wetlands Inventory (USFWS 2023a)
- California Aquatic Resources Inventory (SFEI 2017)
- CNDDDB (CDFW 2023b)
- CNPS Inventory (CNPS 2023a)
- Consortium of California Herbaria (CCH2 2023)
- USFWS Information for Planning and Consultation (USFWS 2023b)
- eBird Online Database (Cornell Lab of Ornithology 2023)
- California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, Online Edition (CNPS 2023b)
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)
- California Natural Community List (CDFW 2023a)
- Database searches (i.e., CNDDDB, CNPS) for special-status species focused on the Dublin and eight surrounding USGS 7.5-minute quadrangles.

Following the remote assessment, WRA biologists completed a field review over the course of three days to document: (1) land cover types (e.g., vegetation communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic land cover types (e.g., wetlands) are present, and (4) if special-status species are present³.

³ Due to the timing of the assessment, it may or may not constitute protocol-level species surveys; see Section 5.2 if the site assessment would constitute a formal or protocol-level species survey.



3.1 Vegetation Communities and Other Land Cover Types

During the site initial visit, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances, communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural Community List (CDFW 2023a) and A Manual of California Vegetation, Online Edition (CNPS 2023b). These resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled [S1/G1], imperiled [S2/G2], or vulnerable [S3/G3]) (CDFW 2023a), were evaluated as sensitive as part of this evaluation.

The site was reviewed for the presence of wetlands and other aquatic resources according to the methods described in the Corps Manual (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West* (Corps 2008) and *A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Regions of the United States* (Mersel and Lichvar 2014). A focused wetland delineation was conducted on May 4, and June 1, 2023, and its results are included in the *Delineation of Potential Waters of the U.S., Chouinard-Owen Public Access Project* (WRA 2023), concurrently submitted with this report. Areas meeting these indicators were mapped as aquatic resources and categorized using the vegetation community classification methods described above. Aquatic communities which are mapped in the NMFS EFH Mapper (NMFS 2023) or otherwise meet criteria for designation as EFH are indicated as such in the community description below in Section 5.1. The presence of riparian habitat was evaluated based on woody plant species meeting the definition of riparian provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607, California Fish and Game Code* (CDFG 1994) and based on best professional judgement of biologists completing the field surveys.

3.2 Special-status Species

3.2.1 General Assessment

Potential occurrence of special-status species in the Study Area was evaluated by first determining which special-status species occur in the vicinity of the Study Area through a literature and database review as described above. Presence of suitable habitat for special-status species was evaluated during the site visits based on physical and biological conditions of the site, as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur in the Study Area was then determined according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).



- **Unlikely.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (i.e., CNDDDB, other reports) on the site in the recent past.

If a special-status species was observed during the site visit, its presence was recorded and discussed below in Section 5.2. If designated critical habitat is present for a species, the extent of critical habitat present and an evaluation of critical habitat elements is provided as part of the species discussions below.

3.2.2 Special-status Plants

Three (3) protocol-level special-status plant surveys were conducted by WRA biologists on May 4 and June 1, 2023, and August 6, 2024, to determine whether any special-status plant species are present within the Study Area. The survey methodology and results are detailed in Section 5.2.1.

3.3 Wildlife Corridors and Native Wildlife Nursery Sites

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the habitat connectivity data available through the CDFW Biogeographic Information and Observation System (CDFW 2023c). Additionally, aerial imagery (Google Earth 2023) for the local area was referenced to assess if local core habitat areas were present within, or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites is evaluated as part of the site visit and discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites) and colonial roosting sites for other species (such as for monarch butterfly [*Danaus plexippus*]).



4.0 ECOLOGICAL SETTING

The approximately 25-acre Study Area is located in Union City and in unincorporated Alameda County, California and can be accessed via Palomares Road. The Study Area encompasses all areas affected by the Project, including the existing trail segment, proposed realignment, and crossing locations. Additional details of the local setting are below.

4.1 Soils and Topography

The overall topography of the Study Area is steeply sloped, with elevations ranging from approximately 1,000 to 1,500 feet above sea level. According to the *Soil Survey of Alameda Area, California* (USDA 1966) and SoilWeb (CSRL 2023), the Study Area is underlain by four soil mapping units: *Gaviota rocky sandy loam, 40 to 75 percent slopes, eroded*; *Los Gatos-Los Osos complex, 30 to 75 percent slopes, eroded, MLRA 15*; *Los Osos loam, seeped variant, 3 to 15 percent slopes*; and *Yolo loam, 3 to 10 percent slopes*. Descriptions of the soil series that comprise the soil mapping units are provided below. The distribution of these soil mapping units within the Study Area is depicted in Appendix A – Figure 3.

Gaviota Series: Soils in the Gaviota Series consist of very shallow to shallow, well drained soils that formed in material weathered from hard sandstone or meta-sandstone. Gaviota soils occur on hills and mountains, under livestock grazing areas and agriculture for dryland grain. They are well and excessive drained with very low to very high runoff and moderately rapid permeability (CSRL 2023). The *Gaviota rocky sandy loam, 40 to 75 percent slopes, eroded* mapping unit is not considered hydric (USDA 2023).

Los Gatos: Soils in the Los Gatos Series consist of fine-loamy, mixed, mesic soils that typically formed in material weathered from firm to hard sandstone and shale. Typically, Los Gatos soils occur in areas used for watershed or wildlife protection' with some areas used for range and less sloping areas used for orchards and vineyards. These soils are well-drained with rapid to very rapid runoff and moderate permeability (CSRL 2023). The *Los Gatos-Los Osos complex, 30 to 75 percent slopes, eroded, MLRA 15* mapping unit is not considered hydric (USDA 2023).

Los Osos: Soils in the Los Osos Series consists of moderately deep, well drained soils that formed in material weathered from sandstone and shale. Typically, Los Osos soils are used mostly for range, with limited areas for grain crops. These soils are well drained with very high runoff and slow permeability (CSRL 2023). The *Los Gatos-Los Osos complex, 30 to 75 percent slopes, eroded, MLRA 15* mapping units is not considered hydric. The *Los Osos loam, seeped variant, 3 to 15 percent slopes* mapping unit is considered hydric (USDA 2023).

Yolo Series: Soils in the Yolo Series consist of very deep, well drained soils that formed in alluvium from mixed rocks. Yolo soils typically found on alluvial fans and flood plains. Land uses include intensive farming for field and orchard crops. These soils are well drained with slow to medium runoff and moderate permeability. However, years of tilling have created hard pans over broad areas that tend to restrict permeability (CSRL 2023). The *Yolo loam, 3 to 10 percent slopes* mapping unit is not considered hydric (USDA 2023).



4.2 Climate and Hydrology

The Study Area is located in the Alameda Creek watershed within the 18050004 Hydrologic Unit Code-8 watershed. Annual rainfall within this watershed averages 19.5 inches, with the majority of rain falling between December and March. Other hydrological sources for the Study Area include ephemeral and intermittent streams that convey water into and through the Study Area. Two intermittent streams, which are fed by ephemeral tributaries and a seasonal wetland complex, flow from west to east through the Study Area, eventually flowing under Palomares Road to Stonybrook Creek, which flows south through Stonybrook Canyon. This stream eventually connects, outside of the Study Area, to Alameda Creek at Niles Canyon Road. Alameda Creek is a perennial stream that eventually connects to the San Francisco Bay. There are three unnamed blue-line streams in the Study Area (USGS 202). The National Wetlands Inventory classified the aquatic features in the Study Area as “Freshwater Forested/Shrub Wetland” and “Freshwater Emergent Wetland” (USFWS 2023a), and the California Aquatic Resources Inventory defines the above streams and additional tributaries as “Fluvial Natural” (SFEI 2017). Detailed descriptions of aquatic resources are provided in Section 5.1 below.

4.3 Land Use

The majority of the Study Area is undeveloped and borders open space managed by the EBRPD for public access and recreational trail use. The developed portions of the Study Area include the former Chouinard vineyard, including rows of grape vines and associated infrastructure such as a gravel parking lot and access road/driveway from Palomares Road. Detailed land cover type descriptions are included in Section 5.1 below, and all observed plant and wildlife species are included in Appendix B. Surrounding land uses include undeveloped, open space, and private residential housing (Google Earth 2023).



5.0 ASSESSMENT RESULTS

5.1 Vegetation Communities and Other Land Cover

WRA observed eleven land cover types within the Study Area: California Bay - Coast Live Oak/ Poison Oak Forest, California Bay Woodland, California Bay - Bigleaf Maple Woodland, Coast Live Oak/Poison Oak Woodland, Coyote Brush Scrub, Soft Chess – Barley – Burclover Ruderal Grassland, Wild Oat Ruderal Grassland, Developed/Disturbed, Irish-leaf Rush Seep, Intermittent Stream, and Ephemeral Stream. Land cover types within the Study Area are illustrated in **Appendix A – Figure 4**. Land cover types consisting of vegetated areas were mapped to the association level. Areas mapped as intermittent and ephemeral streams, which were generally unvegetated or sparsely vegetated, and developed/disturbed areas did not conform to described vegetation alliances or associations and were instead mapped by WRA using a more general classification that fit on-site conditions. Descriptions of land cover types are included in **Section 5.1.1**.

The non-sensitive land cover types in the Study Area include: Soft Chess – Barley – Burclover Ruderal Grassland, Wild Oat Ruderal Grassland, Coyote Brush Scrub, Coast Live Oak/ Poison Oak Forest (in part), and Developed/Disturbed. The sensitive land cover types include: California Bay - Coast Live Oak/ Poison Oak Forest (in part), California Bay Woodland (Riparian), California Bay - Bigleaf Maple Woodland (Riparian), Irish-leaf Rush Seep, Intermittent Stream, and Ephemeral Stream. Acreages, sensitivity status, and alliances and associations for the Study Area are included in Table 3 below.

Table 3: Vegetation Communities and Other Land Cover Types

LAND COVER TYPE	VEGETATION ALLIANCE	SENSITIVE STATUS	ACRES WITHIN STUDY AREA
TERRESTRIAL LAND COVER			
California Bay - Coast Live Oak/ Poison Oak Forest	California Bay Forest and Woodland	Sensitive	11.22
California Bay Woodland	California Bay Forest and Woodland	Sensitive	2.68
California Bay - Bigleaf Maple Woodland	Bigleaf Maple Forest Woodland	Sensitive	4.07
Coast Live Oak/Poison Oak Woodland	Coast Live Oak Forest and Woodland	Sensitive (in part)	0.32
Coyote Brush Scrub	Coyote Brush Scrub	Not sensitive	0.26
Soft Chess – Barley – Burclover Ruderal Grassland	Wild Oats and Annual Brome Grassland	Not sensitive	0.51
Wild Oat Ruderal Grassland	Wild Oats and Annual Brome Grassland	Not sensitive	3.50
Developed/Disturbed	N/A	Not sensitive	1.26
AQUATIC RESOURCES			
Iris-leaf Rush Seeps	Iris-leaf Rush Seeps	Sensitive	0.46
Intermittent Stream	N/A	Sensitive	0.91
Ephemeral Stream	N/A	Sensitive	0.03



5.1.1 Terrestrial Land Cover

California Bay – Coast Live Oak / Poison Oak Forest (*Umbellularia californica* - *Quercus agrifolia* / *Toxicodendron diversilobum* Association). CDFW Rank: Sensitive. Coast Live Oak / Poison Oak Forest Association is within the California Bay Forest and Woodland (*Umbellularia californica* Forest & Woodland) alliance. This land cover type comprises the majority of the Study Area and makes up all portions of forest dominated by California bay (*Umbellularia californica*) that are not in a riparian position. It occurs on steep slopes on all aspects above the valley bottoms. The overstory is typically dense and dominated by California bay (*Umbellularia californica*) with scattered individuals of coast live oak (*Quercus agrifolia*). The understory is open to dense and primarily herb-dominated, with a sparse shrub layer of poison oak (*Toxicodendron diversilobum*) and California blackberry (*Rubus ursinus*). Common herbs include western sword fern (*Polystichum munitum*), narrow-leaved miner's lettuce (*Claytonia parviflora*), narrow-flowered brome (*Bromus laevipes*), wild strawberry (*Fragaria vesca*), and Pacific sanicle (*Sanicula crassicaulis*). California Bay – Coast Live Oak / Poison Oak Forest is considered sensitive by CDFW.

California Bay Woodland (*Umbellularia californica* Woodland Association). CDFW Rank: Sensitive. California Bay – Bigleaf Maple Woodland Association is within the California Bay Forest and Woodland (*Umbellularia californica* Forest & Woodland) alliance. This land cover type makes up the riparian forest in the central portion of the Study Area. It occurs in the valley bottom along an intermittent stream. Vegetation is typically located above OHWM and is characterized by a dense canopy comprised almost entirely by California bay, with occasional coast live oak, bigleaf maple, and California sycamore (*Platanus racemosa*) individuals totaling less than 1 percent absolute cover. The understory is open and primarily herb-dominated, with a sparse shrub layer of poison oak (*Toxicodendron diversilobum*) and oceanspray (*Holodiscus discolor*). Common herbs include wood fern (*Dryopteris arguta*), western sword fern, Pacific sanicle, herb robert (*Geranium purpureum*), milk maids (*Cardamine californica*), snowberry (*Symphoricarpos albus* var. *laevigatus*), and sweet cicely (*Osmorhiza berteroi*). California Bay Woodland is considered sensitive by CDFW.

California Bay – Bigleaf Maple Woodland (*Umbellularia californica* – *Acer macrophyllum* Woodland Association). CDFW Rank: Sensitive. California Bay – Bigleaf Maple Woodland Association is within the Bigleaf Maple Forest and Woodland (*Acer macrophyllum* Forest & Woodland) alliance. This land cover type makes up the riparian habitat forest in the central and eastern portions of the Study Area. It occurs along two unnamed intermittent streams and along Stonybrook Creek. Vegetation is located above and below OHWM, depending on the reach, and the overstory is dense and dominated by California bay, with bigleaf maple occurring at greater than 30 percent relative cover. Coast live oak and California sycamore are occasionally present, each comprising less than 5 percent absolute cover. The understory is similar to that of California Bay Woodland. California Bay – Bigleaf Maple Woodland is considered sensitive by CDFW.

Coast Live Oak / Poison-oak Woodland (*Quercus agrifolia* / *Toxicodendron diversilobum* Woodland Association). CDFW Rank: None. Coast Live Oak/ Poison-oak Woodland Association is within the Coast Live Oak Woodland and Forest (*Quercus agrifolia* Forest & Woodland) alliance. This land cover type occurs in two locations, in the western and far eastern portions of the Study Area, on steep, north-facing slopes. The overstory is dense, consisting almost entirely



of coast live oak, with occasional California bay, bigleaf maple, California buckeye (*Aesculus californica*), and Pacific madrone (*Arbutus menziesii*) totaling less than 5 percent absolute cover. The understory is typically sparse and consists of wood fern, poison oak, and western sword fern. Coast Live Oak/ Poison-oak Woodland is not considered sensitive by CDFW.

Coyote Brush Scrub (*Baccharis pilularis* Shrubland Association). CDFW Rank: none.

Coyote Brush Scrub Association is within the Coyote Brush Scrub (*Baccharis pilularis* Shrubland) alliance. This land cover type occurs in openings in the woodland on south facing slopes within the central portion of the Study Area and is part of a much larger stand adjacent to the Study Area. Sparse coast live oak and California bay trees are present at low cover. In the shrub layer, coyote brush (*Baccharis pilularis*) is dense and dominant, with sparse poison oak and sparse to no understory. Coyote Brush Scrub is not considered sensitive by CDFW.

Wild Oat Ruderal Grassland (*Avena barbata* – *Avena fatua* Semi-natural Association). CDFW Rank: None. Wild Oat Ruderal Grassland Association is within the Wild Oats and Annual Brome Grasslands (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural) alliance. This land cover type borders the stream on the far western side of the Study Area on south-facing slopes and flats. Trees are absent, and the shrub layer consists of sparse coyote brush individuals in the valley bottom. This grassland is dominated with wild oat (*Avena barbata*, *A. fatua*), ripgut brome (*Bromus diandrus*), and soft chess (*Bromus hordeaceus*) with rose clover (*Trifolium hirtum*), big heron bill (*Erodium botrys*), Italian thistle (*Carduus pycnocephalus*), wavy-leaf soap plant (*Chlorogalum pomeridianum*), and California poppy (*Eschscholzia californica*) at low cover. Wild Oat Ruderal Grassland Association is not considered sensitive by CDFW.

Soft Chess – Barley – Burclover Ruderal Grassland (*Bromus hordeaceus* - *Hordeum* spp. - *Medicago polymorpha* Semi-Natural Association). CDFW Rank: None. The Soft Chess – Barley – Burclover Ruderal Grassland Association is within the Wild Oats and Annual Brome Grasslands (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural) alliance. This land cover type is located near the parking area in the far eastern portion of the Study Area. It consists of areas that were once planted with grapevines but are now colonized by non-native herbs. This grassland is dominated by foxtail barley (*Hordeum murinum*), ripgut brome, and soft chess, and contains Italian thistle, redstem filaree (*Erodium cicutarium*), and poison hemlock (*Conium maculatum*) at lesser cover. The Soft Chess – Barley – Burclover Ruderal Grassland Association is not considered sensitive according to CDFW.

Developed/Disturbed (No Alliance). CDFW Rank: None The developed/disturbed land cover type is located in the far eastern part of the Study Area and includes the parking area, buildings, and grape vines associated with the former Chouinard-Owen Vineyards. This land cover type also includes Palomares Road, which runs north-south through the eastern end of the Study Area. There is no alliance associated with this land cover types, and it is not considered sensitive by CDFW.

5.1.2 Aquatic Resources

Iris-leaf Rush Seeps (*Juncus xiphioides* Herbaceous Association). CDFW Rank: Sensitive. Iris-leaf Rush Seeps are within Iris-leaf Rush Seeps (*Juncus oxymeris* and *J. xiphioides*) (Provisional Herbaceous Alliance) The Iris-leaf rush seep occurs in the far western end of the Study Area, at the head of the intermittent stream that runs along the center of the Study Area. The Iris-leaf rush seep is dominated by iris-leaf rush (*Juncus xiphioides*), low manna grass (*Glyceria*



declinata), and curly dock (*Rumex crispus*). Vegetation met the Dominance Test hydrophytic vegetation indicator, soils smelled like hydrogen sulfide and contained redoximorphic features, and there was standing water within the feature at the time of the May 4, 2023, site visit.

Ephemeral Stream. CDFW Rank: None. Ephemeral Streams within the Study Area are linear features that have indicators of OHWM and may convey flows only during or immediately after a precipitation event but remain dry otherwise. They convey water from the hills on either side of the Study Area, draining towards the intermittent stream that runs throughout the Study Area. Ephemeral streams within the Study Area occur on steep slopes within forested plant communities. The channel bottoms are typically gravelly and unvegetated. Ephemeral streams within the Study Area were dry at the time of the site visit. Observed OHWM indicators included bed and bank, scour, and sediment deposition.

Intermittent Stream. CDFW Rank: None. Features in the intermittent stream category are linear features that have indicators of OHWM, and because of groundwater influence, flow for a duration longer than during or immediately after a precipitation event but are dry the remainder of the year. There are three intermittent streams within the Study Area. Two are located west of Palomares Road, with one running in an easterly direction throughout the center of the Study Area, and the other being a tributary to that stream, only a small portion of which is within the Study Area. These streams eventually flow via a culvert under Palomares Rd and connect to Stonybrook Creek, an intermittent stream that flows south through Stonybrook Canyon and connects to Alameda Creek, far outside of the Study Area. The intermittent streams are within the woodland plant communities, and they support riparian vegetation. The channel bottoms ranged from sandy and gravelly in the upper reaches to large cobbles and boulders in the steepest, widest reaches. The stream channels were often simple, with a single low flow channel and little to no active floodplain, but in the central portion of the Study Area, the intermittent stream was very steep and contained multiple, braided low flow channels with small in-channel islands above OHWM. Observed OHWM indicators included bed and bank, scour, sediment sorting, exposed roots, and destruction of vegetation. In-channel vegetation ranged from absent trees and shrubs at low density include California bay, California sycamore, big leaf maple, coast live oak, poison oak, California blackberry, and snowberry.

5.2 Special-status Species

5.2.1 Special-status Plants

Based upon a review of the resource databases listed in Section 3.0, 60 special-status plant species have been documented in the vicinity of the Study Area. Ten (10) of these species were determined to have potential to occur in the Study Area:

- bent-flowered fiddleneck (*Amsinckia lunaris*)
- big-scale balsamroot (*Balsamorhiza macrolepis*)
- Oakland star-tulip (*Calochortus umbellatus*)
- Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*)
- Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*)
- fragrant fritillary (*Fritillaria liliacea*)
- Diablo helianthella (*Helianthella castanea*)
- bristly leptosiphon (*Leptosiphon aureus*)
- Michael's rein orchid (*Piperia michaelii*)
- Lobb's aquatic buttercup (*Ranunculus lobbii*)



The remaining species documented from the greater vicinity are unlikely or have no potential to occur for one or more of the following reasons:

- Hydrologic conditions (e.g., tidal, salt marsh, vernal pools) necessary to support the special-status plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g., volcanic tuff, serpentine) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g., montane) necessary to support the special-status plant species are not present in the Study Area;
- Unique pH conditions (e.g., alkaline soils) necessary to support the special-status plant species are not present in the Study Area;
- Associated natural communities (e.g., chaparral, dunes, coniferous forest, vernal pools) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated (e.g., above/below elevation, coastal environ) from the documented range of the special-status plant species;

WRA biologists conducted three protocol-level surveys during a period sufficient to identify all ten special-status plant species with the potential to occur. Prior to the May 4, 2023, survey, WRA biologists visited three separate reference sites within Alameda County with confirmed occurrences of four species with a moderate or high potential to occur in the area: bent-flowered fiddleneck, Oakland star-tulip, big-scale balsamroot, and Diablo helianthella. All four species were evident and identifiable at reference sites. A reference site for fragrant fritillary was not visited because May 4 was past the species' bloom period. However, this species is identifiable in fruit, and the potentially suitable habitat in the Study Area (grassland at the far western end) is so limited in size that a thorough search for this species was easily conducted. Nearby, accessible reference sites were not available for the following four special-status species: Santa Clara red ribbons, bristly leptosiphon, Michael's rein orchid, Lobb's aquatic buttercup. However, surveys were conducted during the appropriate blooming period for all of them.

In addition, given that low temperatures in Spring 2023 delayed the blooming of many native plant species, it was determined that Congdon's tarplant may not have been identifiable during the May and June surveys in 2023. Therefore, an additional survey was conducted on August 8, 2024, to confirm the presence/absence of this species. Prior to the survey, WRA visited a known reference site in Alameda County to confirm that Congdon's tarplant was in bloom during that time. However, Congdon's tarplant was not identified within the Study Area.

Table 4 below lists all reference sites that were visited as part of the survey effort.

Table 4. Reference Sites for Special-status Plant Species

Species	Location	Status
bent-flowered fiddleneck	Flicker Ridge, between Canyon and Moraga	Full bloom



big-scale balsamroot	Fairmont Ridge, San Leandro	Past bloom, but leaves and infrutescences still readily identifiable
Oakland star-tulip	Temescal Regional Recreation Area, Oakland	Full bloom
Diablo helianthella	Fairmont Ridge, San Leandro	Past peak, but still blooming
Congdon's tarplant	Empty lot near Dublin Boulevard and Tassajara Road, Dublin	Full bloom

A comprehensive table for the special-status plant species potential to occur in the Study Area is included in **Appendix C**. The species with moderate or high potential to occur in the Study Area are discussed below. In addition, one locally rare species was observed in the Study Area, stinging phacelia (*Phacelia malvifolia* var. *malvifolia*). The location of this species in the Study Area is depicted in **Appendix A – Figure 5**, and it is described below.

Bent-flowered fiddleneck (*Amsinckia lunaris*). Rank 1B.2. High Potential. Not Observed. Not Present. Bent-flowered fiddleneck is an annual forb in the forget-me-not family (Boraginaceae) that blooms from March to June. It typically occurs in open areas within cismontane woodland, valley and foothill grassland, and coastal bluff scrub habitat often underlain by clay substrate at elevations ranging from 10 to 1,625 feet (CDFW 2022a, CNPS 2022a). Known associated species include coast live oak, poison oak, Chilean trefoil (*Acmispon wrangelianus*), common yarrow (*Achillea millefolium*), goldenback fern (*Pentagramma triangularis*), and slender wild oat (*Avena barbata*) (CDFW 2023a). Bent-flowered fiddleneck has a moderate potential to occur in the grassland and openings in woodland at the western end the Study Area. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**

Big-scale balsamroot (*Balsamorhiza macrolepis*). Rank 1B.2. High Potential. Not Observed. Not Present. Big-scale balsamroot is a perennial herb in the sunflower family (Asteraceae) that blooms from March to June. It typically occurs on thin, rocky substrates sometimes derived from serpentine or volcanics in cismontane woodland and valley and foothill grassland habitat at elevations ranging from 150 to 5,100 feet (CDFW 2023b, CNPS 2023a). Known associated species include California onion grass (*Melica californica*) and soap plant (*Chlorogalum pomeridianum* ssp. *pomeridianum*). Big-scale balsamroot has a moderate potential to occur in the grassland and openings in woodland at the western end the Study Area. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**

Oakland star-tulip (*Calochortus umbellatus*). Rank 4.2. High Potential. Not Observed. Not Present. Oakland star-tulip is a perennial herb in the lily family (Liliaceae) that blooms from March to May. It typically occurs in broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland, often on serpentine substrate, at elevations ranging from 330 to 2,300 feet (CDFW 2023b, CNPS 2023a). Known associated species include California buttercup (*Ranunculus californicus*) and California poppy. Oakland star-tulip has a moderate potential to occur in the grassland and openings in woodland at the western end the Study Area. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**



Congdon's tarplant (*Centromadia parryi* ssp. *congdonii*). CRPR 1B. Moderate Potential. Not Observed. Not Present. Congdon's tarplant is an annual forb in the sunflower family (Asteraceae) that blooms from June to November. It typically occurs in alkaline grassy areas on the edge of brackish marsh in valley and foothill grassland habitat at elevations ranging from 1 to 750 feet (CDFW 2023b, CNPS 2023a). Observed associated species include common tarplant (*Centromadia pungens* ssp. *pungens*), alkali heath (*Frankenia salina*), salt grass (*Distichlis spicata*), Italian rye grass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum*), foxtail barley (*Hordeum murinum*), stinkwort (*Dittrichia graveolens*), yellow star thistle (*Centaurea solstitialis*), Italian thistle (*Carduus pycnocephalus*), bull thistle (*Cirsium vulgare*), and Bermuda grass (*Cynodon dactylon*). This species has a moderate potential to occur in grasslands adjacent to drainages. **This species was not observed during the August 2024 site visit and is assumed to be absent from the Study Area.**

Santa Clara red ribbons (*Clarkia concinna* ssp. *automixa*). Rank 4.3. Moderate Potential. Not Observed. Santa Clara red ribbons is an annual herb in the evening primrose family (Onagraceae) that blooms April through July. It typically occurs on slopes and near intermittent streams in chaparral and cismontane woodland at elevation range 295 to 4,920 feet (CNPS 2023a). Known associated species include coast live oak, slender wild oat, sticky monkey flower (*Diplacus aurantiacus*), poison oak, California sagebrush, and coyote brush (*Baccharis pilularis*). This species has a moderate potential to occur in the Study Area within scrub, woodland, and forest habitats. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**

Fragrant fritillary (*Fritillaria liliacea*). Rank 1B.2. Moderate Potential. Not observed. Fragrant fritillary is a low-growing, bulbiferous perennial forb in the lily family (Liliaceae) that blooms from February to April. It typically occurs in open, grassy areas in valley and foothill grassland, coastal scrub, and coastal prairie habitat at elevations ranging from 10 to 1,345 feet (CDFW 2023b, CNPS 2023a). Soil survey data at known locations suggest that this species is typically located on moderately acid (pH 5.8) to neutral (pH 6.7) clay loams to clays derived from volcanics or serpentine (CDFW 2023a). Observed associated species include soap plant, coyote brush, purple needlegrass (*Stipa pulchra*), and California buttercup (CDFW 2023a). Fragrant fritillary has a moderate potential to occur in the grassland at the western end the Study Area. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**

Diablo helianthella (*Helianthella castanea*). Rank 1B.2. Moderate Potential. Not Observed. Diablo helianthella is a woody perennial species in the sunflower (Asteraceae) family that blooms from March through June. It typically occurs in broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland, often on rocky substrates at elevations ranging from 195 to 4,265 feet. (CDFW 2023b, CNPS 2023a). Known associated species include California bay, poison oak, sticky monkey flower, coyote bush, wild oats, and ripgut brome (CDFW 2023a). Diablo helianthella has a moderate potential to occur in the grassland and openings in woodland at the western end the Study Area. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**

Bristly leptosiphon (*Leptosiphon aureus*). Rank 4.2. Moderate Potential. Not Observed. Bristly leptosiphon is an annual forb in the phlox family (Polemoniaceae) that blooms from April to July. It typically occurs in chaparral, cismontane woodland, coastal prairie, and valley and foothill grassland habitat at elevations ranging from 180 to 4920 feet (CNPS 2023a). Known associated



species include redstem filaree and purple needlegrass. Bristly leptosiphon has a moderate potential to occur in the grassland and openings in woodland at the western end the Study Area. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**

Michael's rein orchid (*Piperia michaelii*). Rank 4.2. Moderate Potential. Not Observed. Michael's rein orchid is a perennial rhizomatous herb in the orchid family (Orchidaceae) that blooms from April to August. It typically occurs on dry sites underlain by mudstone or humus soils in coastal bluff scrub, closed-cone coniferous forest, chaparral, cismontane woodland, coastal scrub, and lower montane coniferous forest habitats at elevations ranging from 10 to 3,000 feet (CDFW 2023b, CNPS 2023a). Known associated species include coast live oak, Italian thistle (*Carduus pycnocephalus*), and Pacific sanicle (CCH 2023). Michael's rein orchid has a moderate potential to occur in the Study Area within woodland and forest habitats. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**

Lobb's aquatic buttercup (*Ranunculus lobbii*). Rank 4.2. Moderate Potential. Not Observed. Lobb's buttercup is an annual aquatic forb in the buttercup family (Ranunculaceae) that blooms from February to May. It typically occurs in vernal wet areas within cismontane woodland, North Coast coniferous forest, valley and foothill grassland, and vernal pool habitat at elevations ranging from 50 to 1,540 feet (CNPS 2023a). Known associated species include iris-leaved rush, Italian ryegrass, meadow barley, and Mediterranean barley. Lobb's buttercup has a moderate potential to occur in the western end of the Study Area in sunny aquatic features with standing water during the spring months. **This species was not observed during the May or June site visits and is assumed to be absent from the Study Area.**

LOCALLY RARE SPECIES OBSERVED IN THE STUDY AREA

Stinging phacelia (*Phacelia malvifolia* var. *malvifolia*). Rank A2. Stinging phacelia is an annual herb in the waterleaf family (Hydrophyllaceae). This species blooms from April to July. It is listed as "A2" in the *Rare, Unusual and Significant Plants of Alameda and Contra Costa Counties*, which means there are "4 to 6 current populations in Alameda and Contra Costa County" (Lake 2023). Five individuals of stinging phacelia were observed on June 1, 2023, in the east-central portion of the Study Area. It occurred, in a small, rocky opening within the California Bay – Coast Live Oak / Poison Oak Forest land cover type. Associated species include, but are not limited to, western lady fern (*Athyrium filix-femina* var. *cyclosorum*), poison oak, California maidenhair fern (*Adiantum jordanii*), field hedge parsley (*Torilis arvensis*), and Danny's skullcap (*Scutellaria tuberosa*).

5.2.2 Special-status Wildlife

Of the 39 special-status wildlife species documented in the vicinity of the Study Area, most are excluded from the Study Area based on a lack of habitat features. Features not found within the Study Area that are required to support special-status wildlife species include:

- Vernal pools
- Tidal marsh areas
- Old growth coniferous forest
- Sandy beaches or loose-textured sandy soils



- Vertical cliffs and bank cuts
- Caves, mine shafts, or abandoned buildings

The absence of such habitat features eliminates components critical to the survival or movement of many special-status species found in the vicinity. Additionally, given the Study Area's relative proximity to sensitive habitats on the San Francisco Bay, many species documented nearby are obligates to marine or tidal marsh habitats which are not present on or in the immediate vicinity of the Study Area.

Fifteen (15) special-status wildlife species are assumed to be present or have a moderate or higher potential to occur within portions of the Study Area or immediate vicinity:

- California red-legged frog (*Rana draytonii*)
- San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*)
- northwestern pond turtle (*Actinemys marmorata*)
- white-tailed kite (*Elanus leucurus*)
- golden eagle (*Aquila chrysaetos*)
- loggerhead shrike (*Lanius ludovicianus*)
- yellow warbler (*Setophagia petechia brewsteri*)
- Crotch bumble bee (*Bombus crotchii*)
- Alameda whipsnake (*Masticophis lateralis euryxanthus*)
- hoary bat (*Lasiurus cinereus*)
- pallid bat (*Antrozous pallidus*)
- western red bat (*Lasiurus blossevillii*)
- American badger (*Taxidea taxus*)
- mountain lion (*Puma concolor*)
- steelhead (*Oncorhynchus mykiss irideus* pop. 8)

These species are discussed in greater detail below.

SPECIAL-STATUS WILDLIFE SPECIES CONSIDERED PRESENT IN THE STUDY AREA:

California red-legged frog (*Rana draytonii*), Federal Threatened Species, CDFW Species of Special Concern. Present. California red-legged frog (CRLF) is dependent on suitable aquatic, aestivation, and upland habitat. During periods of wet weather, starting with the first rainfall in late fall, red-legged frogs disperse away from their estivation sites to seek suitable breeding habitat. Aquatic and breeding habitat is characterized by dense, shrubby, riparian vegetation and deep, still, or slow-moving water. Breeding occurs between late November and late April. CRLF estivate (period of inactivity) during the dry months in small mammal burrows, moist leaf litter, incised stream channels, and large cracks in the bottom of dried ponds. This species was observed in the iris-leaf rush seep within the Study Area during the site visit conducted on May 4, 2023. Several stock ponds known to support CRLF breeding occur within 1.5-miles of the Study Area and aquatic habitats within the Study Area are likely used by CRLF as movement corridors in the winter and spring months when water is present. Grassland habitat within the Study Area and surrounding area may provide suitable upland refugia for this species. The Study



Area is not within designated critical habitat for CRLF (USFWS 2010); however, critical habitat for CRLF is present approximately 0.5-miles to the north and northeast. See **Appendix A – Figure 6** for designated critical habitat.

San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). CDFW Species of Special Concern. Present. This subspecies of the dusky-footed woodrat occurs in the Coast Ranges between San Francisco Bay and the Salinas River (Matocq 2003). Occupied habitats are variable and include forest, woodland, riparian areas, and chaparral. Woodrats feed on woody plants, but will also consume fungi, grasses, flowers, and acorns. Foraging occurs on the ground and in bushes and trees. This species constructs robust stick houses/structures in areas with moderate cover and a well-developed understory containing woody debris. Breeding takes place from December to September. Individuals are active year-round, and generally nocturnal. The Study Area contains California bay and coast live oak woodland that provides the moderate canopy and dense understory necessary to support this species. Multiple woodrat nest structures were observed within the Study Area during the site visit conducted by WRA on May 4, 2023.



Photo 1. San Francisco dusky-footed woodrat nest observed on May 4, 2023

generally nocturnal. The Study Area contains California bay and coast live oak woodland that provides the moderate canopy and dense understory necessary to support this species. Multiple woodrat nest structures were observed within the Study Area during the site visit conducted by WRA on May 4, 2023.

White-tailed kite (*Elanus leucurus*). CDFW Fully Protected Species. Present. White-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas, and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities (Dunk 1995). Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall (Dunk 1995). This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates. Suitable nesting trees and foraging habitats are available in the Study Area and immediate vicinity. This species was not observed onsite by WRA; however, sightings have been reported by EBRPD and this species has been documented in the surrounding area in eBird (Cornell Lab of Ornithology 2024).

SPECIAL-STATUS WILDLIFE SPECIES WITH A MODERATE OR HIGH POTENTIAL TO OCCUR IN THE STUDY AREA:

Northwestern pond turtle (*Actinemys marmorata*). Federal Proposed Threatened, CDFW Species of Special Concern. High Potential. The northwestern pond turtle (WPT) is the only native freshwater turtle in California. This turtle is uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and Transverse Ranges. WPT inhabits annual and perennial aquatic habitats, such as coastal lagoons, lakes, ponds, marshes, rivers, and streams from sea level to 5,500 feet in elevation. Pond turtles also occupies man-made habitats such as stock ponds, wastewater storage, percolation ponds, canals, and reservoirs. This species requires low-flowing or stagnant freshwater aquatic habitat with suitable basking structures, including rocks, logs, algal mats, mud banks, and sand. Warm, shallow, nutrient-rich



waters are ideal as they support prey items, which include aquatic invertebrates and occasionally fish, carrion, and vegetation. Turtles require suitable aquatic habitat for most of the year; however, WPT often occupies creeks, rivers, and coastal lagoons that become seasonally unsuitable. To escape periods of high-water flow, high salinity, or prolonged dry conditions, WPT may move upstream and/or take refuge in vegetated, upland habitat for up to four months (Rathbun et al. 2002). Although upland habitat is utilized for refuging and nesting, this species preferentially utilizes aquatic and riparian corridors for movement and dispersal.

WPT nests from late April through July. This species requires open, dry upland habitat with friable soils for nesting and prefer to nest on unshaded slopes within 15 to 330 feet of suitable aquatic habitat (Rathbun et al. 1992). Females venture from water for several hours in the late afternoon or evening during the nesting season to excavate a nest, lay eggs, and bury the eggs to incubate and protect them. Nests are well-concealed, though native mammals are occasionally able to locate and predate upon eggs. Hatchlings generally emerge in late fall but may overwinter in the nest and emerge in early spring of the following year. Aquatics habitats and adjacent uplands within the Study Area and in the immediate vicinity are known to support this species. WPT were not observed within the Study Area during the site visit in May 2023; however, EBRPD biologists have detected this species near the Study Area on multiple occasions (per comms with EBRPD).

Alameda whipsnake (*Masticophis lateralis euryxanthus*). Federal Threatened Species, State Threatened Species. High Potential. The range of the Alameda whipsnake (AWS) is restricted to the inner Coast Range in western and central Contra Costa and Alameda Counties (USFWS 2000). The Alameda whipsnake is associated with scrub communities, including mixed chaparral, chamise-redshank chaparral, coastal scrub, and annual grassland and oak woodlands that lie adjacent to scrub habitats that contain areas of rock outcroppings. Rock outcroppings are important as they are a favored location for lizard prey. Whipsnakes frequently venture into adjacent habitats, including grassland, oak savanna, and occasionally oak-bay woodland. The Study Area is proximate to known occurrences and suitable woodland and scrub communities are present within the Study Area and immediate vicinity. Non-native annual grassland that occurs immediately north of the Study Area contains small mammal burrows and rock-outcroppings that may be utilized by this species. Therefore, there is a high potential for AWS to occur within or disperse into the Study Area from adjacent habitats. The entirety of the Study Area is within designated Alameda whipsnake critical habitat (USFWS 2000). See **Appendix A - Figure 6** for critical habitat within the Study Area.

Golden eagle (*Aquila chrysaetos*), Federal Eagle Protection Act, CDFW Fully Protected Species. Moderate Potential. Golden eagle is a large raptor that occurs in open and semi-open areas from sea level to high elevation. Typical occupied habitats include grasslands, shrublands, deserts, woodlands, and coniferous forests. Breeding activity occurs broadly from January through August, and in California is usually initiated from January to March. The large stick nests of this species are reused across years and may be maintained throughout the year. The Diablo Range population is almost exclusively tree-nesting but this species will also construct nests on the ledges of steep cliffs or on tall manmade structures (e.g., utility towers) (Kochert et al. 2002; Weins 2025). Golden eagles forage over wide areas, feeding primarily on medium-sized mammals (e.g., ground squirrels and rabbits), large birds, and carrion. Oak trees within the Study Area may provide suitable nesting habitat for this species. Suitable foraging habitat in the form of rolling hills, grasslands, and scrub are present in the surrounding area. Ground squirrels were observed during the May 4, 2023, site visit that could be a reliable food source. No



platform nest structures were observed within the Study Area during the site visit; however, an active golden eagle nest has been documented approximately 1.4 miles northeast of the Study Area, and the nesting pair has been observed flying over the Study Area (per comms with EBRPD). As such, the Study Area may provide suitable nesting and foraging habitat for this species.

Loggerhead shrike (*Lanius ludovicianus*), CDFW Species of Special Concern, USFWS Bird of Conservation Concern. Moderate Potential. The loggerhead shrike is a year-round resident and winter visitor in lowlands and foothills throughout California. This species is associated with open country with short vegetation and scattered trees, shrubs, fences, utility lines and/or other perches. Although they are songbirds, shrikes are predatory and forage on a variety of invertebrates and small vertebrates. Captured prey items are often impaled for storage purposes on suitable substrates, including thorns or spikes on vegetation, and barbed wire fences. Nests in trees and large shrubs; nests are usually placed three to ten feet off the ground (Shuford and Gardali 2008). This species was not detected within the Study Area; however, suitable habitat to support nesting and foraging is present.

(Brewster's) Yellow warbler (*Setophaga petechia brewsteri*), CDFW Species of Special Concern, USFWS Bird of Conservation Concern. Moderate Potential. The yellow warbler is a neotropical migrant bird that is widespread in North America, but has declined throughout much of its California breeding range. The Brewster's (*brewsteri*) subspecies is a summer resident and represents the vast majority of yellow warblers that breed in California. West of the Central Valley, typical yellow warbler breeding habitat consists of dense riparian vegetation along watercourses, including wet meadows, with willow growth especially being favored (Shuford and Gardali 2008). Insects comprise the majority of the diet. This species was not detected within the Study Area; however, suitable habitat to support nesting and foraging is present.

Crotch bumble bee (*Bombus crotchii*), State candidate. Moderate Potential. Crotch bumble bee (CBB) occurs primarily in central and southern California, from coastal areas inland to the foothills (Williams et al. 2014). This species is now largely absent from the Central Valley, although it was historically common in this region (Hatfield et al. 2015). CBB occurs in grassland and scrub habitats and has also been documented in agricultural areas. Like other bumble bee species, CBB is a social species with an annual life cycle. Queens emerge from hibernation in the late winter/early spring to establish a new colony. The colony produces workers throughout the spring and summer, and reproductives (i.e. drones and queens) in the early fall. Nests are built in pre-existing cavities. They are commonly found underground, in abandoned rodent burrows, or aboveground in grass tufts, rock piles, abandoned bird nests, or tree cavities. Crotch bumble bee feeds on pollen and nectar during all life stages; preferred host species include (but are not limited to) milkweeds (*Asclepias* spp.), chaenactis (*Chaenactis* spp.), clarkias (*Clarkia* spp.), larkspurs (*Delphinium* spp.), buckwheats (*Eriogonum* spp.), lupines (*Lupinus* spp.), medicks (*Medicago* spp.), bladderpod (*Peritoma arborea*), phacelias (*Phacelia* spp.), poppies (*Eschscholzia* spp.), and sages (*Salvia* spp.). Queens overwinter in hibernacula; little is known about habitat requirements for hibernacula; bare ground, leaf litter and/or duff, and pre-existing cavities may provide overwintering habitat. The Study Area occurs within the currently known range of CBB and grasslands within the Study Area and immediately vicinity provide small mammal burrows that may support this species.

Hoary bat (*Lasiurus cinereus*), WBWG Medium Priority. High Potential. Hoary bats are highly associated with forested habitats in the western United States, particularly in the Pacific



Northwest. They are a solitary species and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches, usually at the edge of a clearing. Roosts are typically 10 to 30 feet above the ground. They have also been documented roosting in caves, beneath rock ledges, in woodpecker holes, in grey squirrel nests, under driftwood, and clinging to the side of buildings, though this behavior is not typical. Hoary bats are thought to be highly migratory, however, wintering sites and migratory routes have not been well documented. This species tolerates a wide range of temperatures and has been captured at air temperatures between 0 and 22 degrees Celsius. Hoary bats probably mate in the fall, with delayed implantation leading to birth in May through July. They usually emerge late in the evening to forage, typically from just over one hour after sunset to after midnight. This species reportedly has a strong preference for moths, but is also known to eat beetles, flies, grasshoppers, termites, dragonflies, and wasps (WBWG 2023). The Study Area contains large trees that may provide roost sites for this species. Stonybrook Creek and tributaries within the Study Area provide a reliable water source. Adjacent habitats, including non-native annual grasslands and California sagebrush scrub are suitable for foraging.

Pallid bat (*Antrozous pallidus*). CDFW Species of Special Concern, WBWG High Priority. Moderate Potential. Pallid bats are distributed from southern British Columbia and Montana to central Mexico, and east to Texas, Oklahoma, and Kansas. This species occurs in a number of habitats ranging from rocky arid deserts to grasslands, and into higher elevation coniferous forests. Roosts are typically in rock crevices, tree hollows, mines, caves, and a variety of man-made structures, including vacant and occupied buildings. Tree roosting has been documented within snags and basal hollows of conifers, and within bole cavities in oak trees. Pallid bats are primarily insectivorous, feeding on large prey that is usually taken on the ground but sometimes in flight. Prey items include arthropods such as scorpions, ground crickets, and cicadas (WBWG 2023). Trees within the Study Area (primarily oaks) may contain cavities or snags suitable for roosting by this species, and there are CNDDDB occurrences in the vicinity (CDFW 2023b). Suitable foraging and drinking resources are present, therefore pallid bat has a moderate potential to occur within the Study Area.

Western red bat (*Lasiurus blossevillei*), CDFW Species of Special Concern, WBWG High Priority. High Potential. This species is highly migratory and broadly distributed, ranging from southern Canada through much of the western United States. Western red bats are believed to make seasonal shifts in their distribution, although there is no evidence of mass migrations (Pierson et al. 2006). They are typically solitary, roosting primarily in the foliage of broad-leaved trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas possibly and association with riparian trees (particularly willows, cottonwoods, and sycamores; Pierson et al. 2006). It is believed that males and females maintain different distributions during pupping, where females take advantage of warmer inland areas and males occur in cooler areas along the coast. Suitable foraging and drinking resources are present and riparian trees within the Study Area may provide roosting habitat for this species.

American badger (*Taxidea taxus*). CDFW Species of Special Concern. Moderate Potential. The American badger is a large, semi-fossorial member of the Mustelidae (i.e., weasel family). It is found uncommonly within the region in drier open stages of most scrub, forest, and herbaceous habitats where friable soils and prey populations are present. Badgers are typically solitary and nocturnal, digging burrows to provide refuge during daylight hours. Burrow entrances are usually elliptical (rather than round), and each burrow generally has only one entrance. Young are born



in the spring and independent by the end of summer. Badgers are carnivores, preying on a variety of fossorial mammals (especially ground squirrels) and occasionally other vertebrates and their eggs. Home ranges for this species tend to be large, depending on the habitat available; population density averages one badger per square mile in prime open country (Long 1973). No badger dens were observed during the May 2023 site visit; however, suitable grassland habitat and open, uncultivated ground are present immediately adjacent to the Study Area and no barriers to movement are present. Prey species, including ground squirrels and gophers, were documented within the Study Area and immediate vicinity during the site visit and may provide a reliable food source.

Mountain lion – Southern California and Central Coast ESU (*Puma concolor*), State Candidate. Moderate Potential. Mountain Lion was listed as a state candidate species in April 2020, which granted protection under CESA to populations within a proposed evolutionarily significant unit (ESU) located in Southern California and the central coast of California. Mountain lions are the second largest felid in North America and have the largest geographic range of any carnivore in the western hemisphere that stretches from southern Chile to the Canadian Yukon (CDFW online, accessed 10/19/2023). This large distribution speaks to the extreme adaptability of the species with respect to its ability to exploit a great variety of different habitats. This adaptability is largely explained by the species' ability to thrive across a huge range of environmental conditions. Mountain lions are mobile predators of the landscapes that they inhabit, with home ranges within the Santa Cruz mountains estimated to be between 40 and 150 square miles. Males tend to defend smaller territories against other males and females tend to have larger territories that may overlap with other lion's territories. Deer and smaller mammals make up the majority of their diets and their hunting activities are mostly nocturnal.

The Study Area occurs within the Southern California and Central Coast ESU range (CDFW 2023c). Mountain lions may utilize the Study Area for hunting or movement given that the Study Area provides sufficient cover habitat, presumably supports prey populations, and occurs within a larger matrix of diverse habitat types including chaparral, grasslands, riparian corridors, and forested areas.

Steelhead – Central California Coast DPS (*Oncorhynchus mykiss irideus*), Federal Threatened. Moderate Potential. The Central California Coast DPS includes all naturally spawned populations of steelhead (and their progeny) in California streams from the Russian River to Aptos Creek, and the drainages of San Francisco and San Pablo Bays eastward to the Napa River (inclusive), excluding the Sacramento–San Joaquin River Basin. Steelhead typically migrate to marine waters after spending two years in freshwater, though they may stay up to seven. They then reside in marine waters for 2 or 3 years prior to returning to their natal stream to spawn as 4-or 5-year-olds. Steelhead adults typically spawn between December and June. In California, females typically spawn two times before they die. Preferred spawning habitat for steelhead is in perennial streams with cool to cold water temperatures, high dissolved oxygen levels and fast flowing water. Abundant riffle areas (shallow areas with gravel or cobble substrate) for spawning and deeper pools with sufficient riparian cover for rearing are necessary for successful breeding. The Study Area includes a reach of Stonybrook Creek, which is tributary to Alameda Creek and known to be historic steelhead spawning habitat. A complete fish passage barrier at the Highway 84 overcrossing immediately upstream of the mouth of Stonybrook Creek was removed in 2022, and with the completion of recent fish passage projects on Alameda Creek, steelhead are expected to be able to access the Stonybrook Creek watershed beginning in the winter of 2022–2023 (ACA 2022). As such, this species has potential to occur within Stonybrook



Creek. However, intermittent tributaries to Stonybrook Creek, west of Palomares Road, are unlikely to provide suitable spawning or rearing habitat for this species.

In addition, the following species was determined to be unlikely to occur within the Study Area but is discussed further below due to its sensitivity and the presence of historical occurrences in the vicinity.

Foothill yellow-legged frog (*Rana boylei*). Federal Threatened, State Endangered, CDFW Species of Special Concern. Unlikely. The foothill yellow-legged frog (FYLF) historically occurred in coastal and mountain streams from southern Oregon to Los Angeles County. This species is strongly associated with rivers and creeks, and prefers shallow, flowing water with a rocky substrate. Individuals do not typically move overland and are rarely observed far from a source of permanent water. In northern California, it was observed adults were on average within ten feet and rarely over 40 feet from the stream (Bourque 2008). Aquatic breeding sites are often near stream confluences, with egg masses typically deposited behind or sometimes under rocks in low-flow areas with cobble and/or gravel (Thomson et al. 2016).

The nearest documented occurrence for this species is approximately 4.5 miles downstream from the Study Area, in Alameda Creek (CDFW 2023b). However, FYLF was last observed at this location in 1953, and subsequent studies suggest that this population has since been extirpated (Lind 2005; Bobzien and DiDonato 2007). Bobzien and DiDonato (2007) concluded from frog breeding surveys in Alameda Creek that the unnatural and consistently higher discharge and irregular flows associated with dam releases create poor reproductive conditions for FYLF. Furthermore, there are no records indicating that this species has been found beyond the upper reaches of Alameda Creek. Given the absence of potential, extant source populations, this species is unlikely to occur in Stonybrook Creek or its tributaries.

5.3 Wildlife Corridors and Native Wildlife Nursery Sites

Wildlife corridors are landscape features that provide connectivity on larger scales between areas of suitable habitat or on smaller scales between habitat and resources such as cover or food that may otherwise be isolated. Corridors must be relatively unobstructed and contain the proper biological communities such that transient and local animals may access them. A sufficient lack of stressors or disturbances within the corridor is also necessary for the corridor to be successful. Corridors vary by species due to species' unique habitat requirements, life histories, size, tolerance of disturbance, and movement patterns. Some species, particularly flying species, can use "stepping stone" dispersal habitats, or closely spaced pockets of habitat between larger core habitat. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat (Hilty et al. 2019).

The Study Area has a moderate potential to function as a wildlife movement corridor. This is based on the Essential Connectivity Areas geospatial dataset, which uses habitat modelling to identify areas of land with value as wildlife corridors (CDFW 2023b). The Study Area is classified in this dataset as "moderately permeable" to ecological flows, meaning that it is of good ecological condition and there is a moderate potential for wildlife to use this portion of the Study Area as a corridor. This is consistent with the evaluations above for CRLF and AWS, which may use the site for movement and therefore be present within the Study Area. In addition, the Study Area may serve as a movement corridor for mountain lion, given the connectivity to multiple



diverse habitat types (chapparral, grasslands, riparian, forested areas) and lack of significant movement barriers.

In addition, the Study Area is part of a wildlife corridor which spans approximately 212,500 acres from Sunol Regional Wilderness in the south all the way to San Pablo Reserve in the north. The linkage provided by the Study Area could provide north-south connectivity for several species, including long ranging species (e.g., western mule deer) and corridor dwellers such as CRLF and San Francisco dusky footed woodrat. Large motile mammals likely derive the greatest benefit from the Study Area's linkage because they often travel very far distances, require large expanses of core habitat, or prefer to travel along corridors that contain enough dense vegetative structure to provide shelter, cover, and/or breeding habitat. Some moderately-sized mammals with larger dispersal capabilities, such as bobcats and coyotes, may be able to use the Study Area and adjacent areas as "live-in" habitat. Additionally, Stonybrook Creek and its tributaries may serve as important "stepping stone" dispersal habitat for a variety of bird and bat species, and also provide "live-in" habitat for many riparian nesting bird species and roosting bats.

5.4 Essential Fish Habitat

The National Oceanic and Atmospheric Administration's EFH geospatial dataset uses habitat modelling to identify water features with value as fishery habitat (NOAA 2023). According to this dataset, the entirety of the San Francisco Bay watershed is designated as Pacific Salmon (coho and Chinook salmon) EFH.

Within Stonybrook Creek, steelhead have been documented spawning when they were relocated above the Bart Weir, which represented a total barrier to anadromy (NMFS 2017). However, in 2022 the Alameda County Water District (ACWD) completed construction and began operation of two modern fishways on lower Alameda Creek which allow migratory salmonids to volitionally pass these barriers, such that Chinook salmon can now enter both Alameda Creek and lower Stonybrook Creek (ACWD 2023).

Chinook salmon (*Oncorhynchus tshawytscha*) has been documented utilizing the fish ladder in 2022 and is the only one of the species covered by salmonid EFH that may be present in San Francisco Bay. Historically, coho salmon (*Oncorhynchus kisutch*) were also present; however, this species has been extirpated from San Francisco Bay (NMFS 2012).

Following construction of the two fish ladders on Alameda Creek, and removal of a fish passage barrier at the mouth of Stonybrook Creek in early 2022 (ACA 2022), lower portions of Stonybrook Creek became accessible by chinook salmon migrating through Alameda Creek. Within the CDFW Passage Assessment Database (CDFW 2023c) there are four full or partial barriers within Stonybrook Creek downstream of the Study Area that may preclude the presence of individual salmonids in the Study Area. However, as defined by the Pacific salmon Fisheries Management Plan (2022), "the geographic extent of freshwater EFH is identified as all water bodies currently or historically occupied by Council-managed salmon in Washington, Oregon, Idaho, and California. Salmon EFH includes aquatic areas above all artificial barriers..." As such, though barriers may exist below the Study Area precluding access by individual fish, Pacific salmon EFH is present within the Study Area.



5.5 Critical Habitat

The Study Area is entirely within designated critical habitat for the federal listed species Alameda whipsnake (USFWS 2000; 71 FR 58176). Designated critical habitat for the federal listed species California red-legged frog (USFWS 2010; 75 FR 12815) occurs immediately northeast of the Study Area. **Appendix A – Figure 6** depicts designated critical habitat within the Study Area and surrounding area.



6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA

Pursuant to Appendix G, Section IV of the State CEQA Guidelines, a project would have a significant impact on biological resources if it would:

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 the CDFW or U.S. Fish and Wildlife Service;
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or U.S. Fish and Wildlife Service;
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
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 wildlife nursery sites;
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or,
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.

These thresholds were utilized in completing the analysis of potential project impacts for CEQA purposes. For the purposes of this analysis, a “substantial adverse effect” is generally interpreted to mean that a potential impact could directly or indirectly affect the resiliency or presence of a local biological community or species population. Potential impacts to natural processes that support biological communities and special-status species populations that can produce similar effects are also considered potentially significant. Impacts to individuals of a species or small areas of existing biological communities may be considered less than significant if those impacts are speculative, beneficial, de minimis, and/or would not affect the resiliency of a local population.



7.0 IMPACTS AND MITIGATION EVALUATION

Using the CEQA analysis methodology outlined in Section 6.2 above, the following section describes potential significant impacts to sensitive resources within the Study Area as well as suggested mitigation measures which are expected to reduce impacts to a less than significant level.

7.1 Special-status Species

This section analyzes the Project's potential impacts and mitigation for special-status species in reference to the significance threshold outlined in CEQA Appendix G, Part IV (a):

Does the project have the potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or U.S. Fish and Wildlife Service?

7.1.1 Special-status Plants

One special-status plant species, stinging phacelia, was observed in the Study Area during protocol-level surveys. This species is restricted to a single location within the Study Area and grading associated with the proposed trial alignment is slated to fully avoid the area where this plant occurs. As such, **no impacts** to special-status plants will occur as a result of the Project.

7.1.2 Special-status Wildlife

California red-legged frog

Given that CRLF is present within the Study Area, individuals may be harassed, harmed, or killed during Project activities, including equipment mobilization, vegetation removal, or initial ground disturbance. CRLF may also be exposed to predation if vegetation removal reduces available cover for individuals during upland dispersal. Impacts to CRLF, a Federal-threatened species, are **significant** under CEQA and will need to be assessed through formal consultation with the Corps pursuant to Section 7 of the ESA. The USFWS issued a Programmatic Biological Opinion in 2012: Programmatic Biological Opinion for U.S. Army Corps of Engineers (Corps) Permitted Projects Utilizing the East Alameda County Conservation Strategy that May Affect Federally Listed Species in East Alameda County, California (Corps File Number 2011-00230S) (08ESMFOO-2012-F-0092-1). The Corps will determine if the project can be appended to the Programmatic Biological Opinion.

Potential Impact BIO-1: Project activities including grading, vegetation removal, and equipment operation may result in the injury or direct mortality of CRLF individuals.

Potential Impact BIO-2: The Project may indirectly impact CRLF aquatic habitat through construction runoff or sedimentation of adjacent waters.

Potential Impact BIO-3: Vegetation removal may reduce available cover for individuals during upland dispersal.



To reduce potential impacts to CRLF to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-1: The Project proponent will purchase mitigation credits from a mitigation bank approved by the USFWS with a Service Area that covers the Project site to compensate for impacts to suitable CRLF habitat associated with the Project. Permanent impacts will be mitigated for at a 3:1 mitigation ratio and temporary impacts at a 1:1 mitigation ratio, unless otherwise stipulated in the Programmatic Biological Opinion issued by the USFWS (08ESMFOO-2012-F-0092-1). Currently, CRLF credits are available from the Ridge Top Ranch Conservation Bank or Ohlone West Conservation Bank and would need to be approved by the USFWS before purchase. These credits would be purchased prior to any impacts to CRLF habitats.

Mitigation Measure BIO-2: A qualified biologist or biological monitor shall provide a worker environmental training program to all personnel involved in Project construction. At a minimum, the employee education program shall consist of a brief presentation by persons knowledgeable about the biology of sensitive species with potential to occur in the Project footprint, and about their legislative protection to explain concerns to contractors and their employees involved with implementation of the Project. The program will include a description of this species and its habitat needs, any reports of occurrences in the area, an explanation of the status of these species and their protection under State and Federal legislation, and a list of measures being taken to reduce impacts to these species during construction.

Mitigation Measure BIO-3: An exclusion fence cannot be established around the entire site due to the variety of topography and hydrologic conditions in the Project area; therefore, an exclusion fence (such as silt fencing) shall be installed around any staging and storage areas only. The exclusion fence will stand at least 2 feet high and be buried at least 6 inches deep or will otherwise be secured along the bottom to prevent wildlife from passing underneath (i.e., with sandbags or similar materials). The fence shall be made of an opaque material (such as silt fencing). Any access gates will be closed each night and secured to prevent entry by CRLF or other nocturnal amphibians. If no vegetation is present within 25 feet of the exclusion fence, cover boards will be placed approximately every 100 feet to provide intermittent cover for CRLF or other amphibians. If vegetation is present within 25 feet, no cover boards are necessary. The exclusion fence will be surveyed daily by a qualified biologist or designated individual to identify and address issues that could allow CRLF or other special-status species to enter the staging area.

Mitigation Measure BIO-4: A qualified biologist shall be present for the duration of the following Project activities:

- Installation of wildlife exclusion measures;
- Initial vegetation removal;
- Initial grading or grubbing;
- Any relocations of special-status species



Mitigation Measure BIO-5: Prior to the commencement of work with wheeled or tracked equipment in vegetated areas, vegetation that could conceal sensitive species shall be surveyed by a qualified biologist or biological monitor. If vegetation is too dense to be adequately surveyed (e.g., thick bushes, etc.), a qualified biologist or biological monitor will observe vegetation removal until vegetation is cleared sufficiently for the biologist to survey the area and verify the presence or absence of amphibians (or reptiles). If no amphibians (or reptiles) are found, the vegetation shall be fully removed, and work may continue. If CRLF are observed, they shall be relocated by a qualified biologist according to the procedure outlined in **Mitigation Measure BIO-7**.

Mitigation Measure BIO-6: Once initial vegetation removal or grading is complete, a morning pre-construction check may be conducted by a biological monitor, or designated individual who has been trained by the qualified biologist. The inspection shall occur prior to initiation of Project activities each day and include an inspection of all work areas, staging/stockpiling areas, and all equipment and vehicles. If a qualified biologist, biological monitor, or designated individual, determines that sensitive species are not present within the work area, work may commence. However, if a CRLF is observed, work will be stopped and the qualified biologist will be notified. The qualified biologist, any biological monitors, and designated individuals shall have stop-work authority.

Mitigation Measure BIO-7: If any CRLF are observed in the Project area and relocation is authorized under obtained permits, the individual(s) will be captured by the qualified biologist and relocated outside of the Project area. Capture will proceed as follows:

- a. Prior to handling the animal(s), the biologist will assure their hands are free of toxins (i.e., sunscreen, bug repellent, etc.) or they may use moistened latex or nitrile gloves to handle/capture the animal(s).
- b. A clean bucket containing moist leaf litter, or a sponge moistened with non-chlorinated water will be used to hold and transport the animal(s).
- c. The qualified biologist will capture the animal by hand, or with the use of appropriate tools (e.g., dip net).
- d. The animal will be relocated outside of the Project area, at least 200 feet from similar riparian or aquatic habitat.
- e. Information regarding the capture including number of individuals, date, time, approximate size, sex (if known), capture location coordinates, and release location coordinates will be recorded, along with any other relevant information.
- f. Any equipment used for relocation or capture will be properly decontaminated according to standard protocols for the species before and after use.

Mitigation Measures BIO-8: All construction activities shall cease one half-hour before sunset and shall not begin prior to one half-hour after sunrise.



Mitigation Measures BIO-9: Construction activities shall not occur for 24 hours after rain events that deliver >0.25 inches of rain without the presence of a full-time qualified biologist onsite to monitor activities.

Mitigation Measure BIO-10: Any open holes or trenches greater than 12 inches deep shall be covered or have escape ramps no steeper than 45 degrees installed at the end of each working day to prevent CRLF or other species from becoming entrapped. Open holes or trenches shall be inspected for entrapped wildlife before work begins.

Mitigation Measure BIO-11: Erosion control measures shall be utilized throughout all areas of the Project where sediment runoff from construction may enter adjacent waters. This will include the use of one or more of the following: construction fencing, straw wattles, and/or other appropriate stormwater pollution prevention measures to be placed around the aquatic resources to minimize sediment and/or pollutants from entering aquatic features. Erosion control measures will be monitored for effectiveness and will be repaired or replaced as needed.

Mitigation Measure BIO-12: No fueling, cleaning, or maintenance of vehicles or equipment will take place within any areas where an accidental discharge may cause hazardous materials to enter waterways. Any equipment or vehicles used for the Project will be checked and maintained daily to prevent leaks of fluids that could be deleterious to aquatic habitat. All refueling and maintenance of equipment, other than stationary equipment, will occur outside of the top-of-bank. No equipment will operate from within the channel (top of bank to top of bank).

The implementation of these measures will reduce potential impacts to CRLF to a level that is **less than significant**.

San Francisco dusky-footed woodrat

Dusky-footed woodrat is present in riparian habitat within the Study Area. Several potentially active woodrat nests were observed during the site visit conducted by WRA on May 4, 2023. As such, Project activities may directly impact dusky-footed woodrat by destroying active nests during trail construction, if nests are not avoided. In addition, the Project may result in indirect impacts to dusky-footed woodrat through an increase of noise, introduction of pathogens, and presence of pets. Destroying active nests, or indirectly disturbing nests through the introduction of public access in the immediate vicinity of the nest is considered **significant** under CEQA.

Potential Impact BIO-4: If existing nest structures are not avoided, Project activities may result in mortality or directly impact dusky-footed woodrats and their nests.

Potential Impact BIO-5: The introduction of public access into previously undisturbed riparian habitat may result in indirect impacts to woodrats through increase in noise, introduction of pathogens, and/or presence of pets.

To reduce impacts to San Francisco dusky-footed woodrat to a less-than-significant level, the following measure shall be implemented:



Mitigation Measure BIO-13: Prior to vegetation removal and/or ground disturbance within suitable habitat, a pre-construction survey for woodrat structures/houses shall be conducted by a qualified biologist. Any woodrat structures found during the survey shall be flagged and avoided to the fullest extent feasible.

If avoidance of nest structures is not possible, the Project proponent shall submit a woodrat nest relocation plan to CDFW for approval. Nest structures that cannot be avoided shall be dismantled by hand under the supervision of a qualified biologist and in accordance with CDFW-approved methodology. Dismantled nest material shall be moved to adjacent vegetated areas that will not be disturbed. If woodrat young are encountered during the dismantling process, the material shall be placed back on the house and a work exclusion buffer of at least 50 feet shall be placed around the structure for a minimum of two weeks to allow the young to mature and leave the nest on their own accord, unless otherwise approved by CDFW.

Implementation of **Mitigation Measures BIO-2 and BIO-13** will reduce potential impacts to San Francisco dusky-footed woodrat to a level that is **less than significant**.

Alameda Whipsnake

The Study Area occurs within designated critical habitat for AWS and may support this species. As such, indirect impacts to AWS may occur through the destruction of habitat. If AWS individuals are present within the Project footprint, direct impacts may occur due to interactions with construction traffic or entrapment in open trenches/holes, equipment, or materials. In addition, individuals may seek refuge in equipment or materials overnight and use of equipment or materials with these species inside may cause mortality. Impacts to AWS, a Federal and State threatened species, and its critical habitat are **significant** under CEQA, and will be assessed through formal consultation with the Corps and USFWS pursuant to Section 7 of the ESA. The USFWS issued a Programmatic Biological Opinion in 2012: Programmatic Biological Opinion for U.S. Army Corps of Engineers (Corps) Permitted Projects Utilizing the East Alameda County Conservation Strategy that May Affect Federally Listed Species in East Alameda County, California (Corps File Number 2011-00230S) (08ESMFOO-2012-F-0092-1). The Corps will determine if the project can be appended to the Programmatic Biological Opinion.

In addition, an ITP pursuant to Section 2081 subdivision (b) of the Fish and Game Code from the CDFW will be obtained prior to activities that could result in mortality and/or harassment to AWS (e.g., clearing, grubbing, excavation, grading or construction). Any measures included in Programmatic Biological Opinion or the CDFW ITP will take precedent, should they differ from those described herein.

Potential Impact BIO-6: The Project may result in loss of suitable habitat for AWS.

Potential Impact BIO-7: The proposed Project activities could result in direct mortality, injury, or harassment of AWS individuals.



To reduce potential impacts to AWS to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-14: The Project proponent will purchase mitigation credits from a mitigation bank approved by the USFWS and CDFW with a Service Area that covers the Project site to compensate for impacts to suitable AWS habitat associated with the Project. Permanent impacts will be mitigated for at a 3:1 mitigation ratio and temporary impacts at a 1:1 mitigation ratio, unless otherwise approved by the USFWS and CDFW. Currently, AWS credits are available from the Ohlone West Conservation Bank and would need to be approved by the USFWS and CDFW before purchase. These credits would be purchased prior to any impacts to AWS habitat.

Mitigation Measure BIO-15: If a snake of any species is observed during any point of the project, all work shall immediately halt, all equipment shall be powered off, and work shall not continue until the snake species can be identified by the qualified biologist. If the snake is not AWS, then either the qualified biologist or biological monitor shall move the snake out of harm's way prior to work proceeding. If AWS is discovered at any time within the project site or staging areas, project activities shall not resume until CDFW been notified and Permittee can demonstrate compliance with CESA to CDFW's satisfaction.

Implementation of these measures as well as **Mitigation Measures BIO-2, BIO-3, and BIO-4, BIO-5, BIO-6, BIO-8, and BIO-10** will reduce potential impacts to Alameda whipsnake to a level that is **less than significant**.

Northwestern pond turtle

This species may disperse through Stonybrook Creek and its tributaries during periods of high flow and could utilize adjacent uplands for nesting, if present. Project activities within or adjacent to aquatic habitat, including the construction of stream crossings, could result in the direct mortality of WPT or indirect impacts due to temporary degradation of habitat. Impacts to WPT are considered **potentially significant** under CEQA.

Potential Impact BIO-8: Project construction activities may result in direct impacts to WPT during stream crossing installation and during any grading within adjacent uplands.

Potential Impact BIO-9: The Project may indirectly impact WPT aquatic habitat through construction runoff or sedimentation of downstream receiving waters.

To reduce potential impacts to WPT to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-16: A qualified biologist shall conduct a pre-construction survey for WPT and other special-status species within 48 hours prior to the initiation of construction activities within 300 feet of aquatic habitat. If WPT are found in the work area, they will be relocated outside the work area, with USFWS and CDFW-approval.



The implementation of these measures, in addition to **Mitigation Measures BIO-2, BIO-11, and BIO-12** will reduce potential impacts to WPT to a level that is **less than significant**.

Steelhead

Steelhead have been documented in the lower sections of Stonybrook Creek and may have the potential to occur in the Study Area during portions of the year when water is present. However, waters within the Study Area are ephemeral or intermittent, as described in Section 5.1, and as such do not provide year-round habitat for steelhead. To avoid direct effects to steelhead, Project activities within Stonybrook Creek and tributaries will occur during the dry season (June 1 through October 31) when flowing water is not present. Restricting work to this period would avoid any potential for direct impacts and eliminate the need for water diversion and fish relocation. However, Project activities may still result in indirect impacts to steelhead through erosion or pollutants left behind by the Project. Indirect impacts to steelhead, a Federal-threatened species, would be **potentially significant** under CEQA and would require consultation between the Corps and NMFS pursuant to Section 7 of the ESA.

Potential Impact BIO-10: The Project may indirectly impact steelhead habitat via construction runoff, sedimentation, or toxic effects from spills.

Working when the streams are naturally dry between June 1 and October 31, as well as the implementation of **Mitigation Measure BIO-11 and BIO-12** will reduce potential impacts to steelhead to a level that is **less than significant**.

American Badger

No badger dens were observed by WRA biologists during the site visit on May 4, 2023. However, if badgers are present within adjacent open space, any ground disturbing activities (e.g. operation of heavy equipment, vegetation removal, grading) could result in impacts to American badger dens or mortality of individuals. Impacts to American badger are considered **potentially significant impact** under CEQA.

Potential Impact BIO-11: Construction activities could result in injury or mortality of individuals if dens are present in adjacent grassland habitats.

To reduce potential impacts to American badger to a less-than-significant level, the following measure shall be implemented:

Mitigation Measure BIO-17: Within 48 hours prior to any construction activities, a qualified biologist will conduct a survey for badger dens within the Project footprint and surrounding 100 feet. If an active den is found, a CDFW-approved non-disturbance buffer shall be established around the den. If the trail alignment cannot be revised to avoid the badger den location, CDFW shall be consulted to determine an appropriate course of action.

The implementation of **Mitigation Measures BIO-2 and BIO-17** will reduce potential impacts to American badger to a level that is **less than significant**.



Crotch Bumble Bee

This assessment determined that CBB has potential to occur within the Study Area, particularly within grassland habitat, given the presence of suitable underground refugia and foraging resources. Impacts to CBB, a State candidate species, are considered **potentially significant** under CEQA and consultation with CDFW may be required if this species is confirmed to be present.

Potential Impact BIO-12: Ground disturbing activities (e.g. operation of heavy equipment, vegetation removal, grading) within suitable habitat areas could result in impacts to CBB nests.

To reduce potential impacts to Crotch bumble bee to a less-than-significant level, the following measure shall be implemented:

Mitigation Measure BIO-18: A qualified bumble bee biologist shall survey for Crotch bumble bee no more than 14 days prior to the commencement of construction activities during the colony active period or the gyne flight season (generally, April 1 to October 31). The survey shall occur at least two hours after sunrise (> 60F and < 90F with no rain) or two hours before sunset and the survey area shall include the project boundaries and a surrounding 100-foot buffer area. The survey duration shall be appropriate to the size of the project site and buffer area based on the metric of a minimum of one person-hour of searching per three acres of suitable habitat.

During the survey(s) the qualified biologists may not capture or handle bumble bees unless specifically authorized to do so for the project by CDFW. At a minimum, survey methods shall include the following:

- Search areas with flowering plants for foraging bumble bees. Observed foraging activity may indicate a nest is nearby, and therefore, the survey duration shall be increased when foraging bees are present.
- Watch any bumble bees present and observe their flight patterns. Attempt to track their movements between foraging areas and the nest.
- Visually look for nest entrances. Observe burrow, any other underground cavities, logs, or other possible nesting habitat.
- Look for concentrated bumble bee activity.
- Listen for humming of nest colony.
- If bumble bees are observed, attempt to identify the species by taking a picture.
- If foraging bees are present and a nest has not been found, floral resources within the project's disturbance footprint may be carefully removed with hand-held tools to minimize foraging bee presence during project activities. The continuation of bumble bee activity once such floral resources are removed may be an indication that a nest is present.
- The biologist conducting the survey shall record when the survey was conducted, a general description of any suitable foraging habitat/floral resources present, a description of observed bumble bee activity, a description of any vegetation removed to facilitate the survey, and their determination of if the survey observations suggest a Crotch bumble bee nest may be present or if construction activities could otherwise harm the species. The survey may be conducted



immediately prior to construction granted all the above and below conditions are met.

If a Crotch bumble bee is observed during the survey (not associated with a nest), or if any sign(s) of a bumble bee nest is observed and if it cannot be established the species present is not Crotch bumble bee, then construction shall not commence until CDFW provides further guidance, which may include an additional survey by a bumble bee expert, waiting until the colony active season ends, obtaining take authorization, or other actions.

The implementation of this measure will reduce potential impacts to Crotch bumble bee to a level that is **less than significant**.

Native Nesting Birds and Special-status Birds

This assessment determined that four special-status bird species may nest within the Study Area or in the immediate vicinity: white-tailed kite, golden eagle, loggerhead shrike, and yellow warbler. In addition to special-status nesting birds, common avian species may also nest within the Study Area and may be similarly affected by Project activities. Grading and vegetation removal proposed within the Study Area may directly impact the nests of protected species or may impact these species indirectly through visual and auditory disturbance sufficient to cause nest abandonment. Due to the protected status of these species under both the MBTA and CFGC, impacts to special-status and common native nesting birds would be considered a **potentially significant impact** under CEQA.

Potential Impact BIO-13: Grading activities and vegetation removal associated with the proposed Project could result in the destruction or abandonment of nests of special-status or non-special-status bird species protected under the MBTA and CFGC.

To reduce potential impacts to special-status birds and native nesting birds to a less-than-significant level, the following measure should be implemented:

Mitigation Measure BIO-19: To the extent practical, Project-related activities should be avoided during the nesting bird season, generally defined as February 1 – September 15. If Project work must occur during the nesting bird season, a pre-construction nesting bird survey shall be conducted within 7 days of ground disturbance or vegetation removal to avoid disturbance to active nests, eggs, and/or young of nesting birds. Surveys shall be conducted throughout all potential nesting habitats located within and adjacent to the Project area, including staging and storage areas.

If an active nest is located, a no disturbance buffer shall be established around the nest. Active nest sites and protective buffer zones shall be designated as “Environmentally Sensitive Areas” where no Project-related activities may occur until a qualified biologist determines that the young have fully fledged, or the nest otherwise becomes inactive (e.g., due to predation), and will no longer be adversely affected by the Project. Suggested buffer zone distances differ depending on species, existing conditions, and nest placement and shall be determined and implemented in the field by a qualified biologist. If the nest of a special-status species is discovered, consultation with CDFW may be required.



Mitigation Measure BIO-20: If a golden eagle nest is observed within the Project area or immediate vicinity, during or following construction, CDFW shall be notified. If the nest occurs within a distance that a qualified biologist or CDFW determines could result in the disruption of nesting, seasonal trail closures shall be implemented, as deemed appropriate, to ensure that trail use does not disrupt nesting.

The implementation of these mitigation measures will reduce potential impacts to special-status birds and native nesting birds to a **less-than-significant** level.

Roosting Bats

This assessment determined that three special-status bat species have potential to occur within the Study Area: hoary bat, pallid bat, and western red bat. In addition, trees within the Study Area may support non-special-status bat roosts protected under the CFGC. Impacts to roosting bats would be considered a **potentially significant impact** under CEQA.

Potential Impact BIO-14: Tree removal associated with the proposed Project could result in the direct removal of active bat roosts protected under the CFGC and CEQA.

To reduce potential impacts to roosting bats to a less-than-significant level, the following measure should be implemented:

Mitigation Measure BIO-21: To the extent feasible, the removal or trimming of any trees with a diameter at breast height (DBH) greater than 16 inches should occur outside of the bat maternity season (generally defined as April through September). Irrespective of the time of year, a bat roost assessment shall be conducted by a qualified biologist no more than 30 days prior to tree removal/trimming to determine if potential roost habitat is present.

- a. If the tree has no potential to support roosting bats (e.g., no large basal cavities, exfoliating bark or interstitial spaces), the tree may be removed with no further measures required to protect roosting bats.
- b. If potential bat roosting habitat is present, and work is occurring outside the maternity season, the qualified biologist may either 1.) Conduct an emergence survey to determine if the roost is occupied; or 2.) The tree may be felled using a two-phased cut.
 - i. If the emergence survey confirms the roost is inactive, the tree may be felled normally.
 - ii. If the roost is confirmed active, or is assumed to be active, a two-phased cut shall be employed to remove the tree. On day one, the qualified biologist shall oversee removal of branches and small limbs not containing potential bat roost habitat using hand tools such as chainsaws or handsaws only. The next day, the rest of the tree may be removed.
- c. If potential bat roosting habitat is present and work is occurring during the maternity season, the qualified biologist may either 1.) Conduct an emergence survey to determine if the roost is occupied; or 2.) Assume the roost is occupied and a buffer shall be implemented.
 - i. If the emergence survey does not detect bats, the tree may be removed normally. If roosting bats are detected, or the tree is assumed to be an



active roost, the tree shall be given a 100-foot buffer and shall be avoided until after the maternity roosting season is complete.

Mitigation Measure BIO-22: All felled trees should remain on the ground for at least 24 hours prior to chipping, off-site removal, or other processing to allow any day roosting bats to escape.

The implementation of Mitigation Measures **BIO-21** and **BIO-22** will reduce potential impacts to roosting bats to a **less-than-significant** level.

7.2 Sensitive Natural Communities and Land Cover Types

This section addresses the question:

b) Does the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or U.S. Fish and Wildlife Service;

The following natural communities are considered sensitive by the CDFW: California Bay Woodland and California Bay - Bigleaf Maple Woodland. Additionally, riparian vegetation within these areas is under the jurisdiction of CDFW per Section 1602 of the CFGC. Coast Live Oak / Poison-oak Woodland is not considered sensitive by CDFW. Project activities may require the removal or trimming of trees associated with sensitive communities to accommodate the proposed trail design and allow for equipment access.

Figure 7 depicts land cover types within the proposed trail alignment where temporary and permanent impacts are anticipated. Permanent impacts will result from the creation of a new, approximately 6-foot wide trail and new and improved stream crossings along the alignment. Temporary impacts will result from adjacent slough and back cut associated with trail construction of temporarily disturbed soils on either side of the trail. Overall, the total acreages of impacts are expected to be relatively minimal and will partially occur along existing ranch roads. Nonetheless, impacts to sensitive natural communities would be considered **significant** under CEQA.

In addition, an LSAA will be obtained from CDFW prior to the initiation of any disturbance within riparian habitat. All compliance measures included in City/County and Agency permits will be adhered to and will take precedent over the measures contained herein, should they differ.

Potential Impact BIO-15: Trail construction may result in temporary and permanent impacts to sensitive natural communities including California bay woodland and/or riparian habitats, as depicted on **Figure 7**.

To reduce potential impacts to sensitive natural communities to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-23: Disturbance to sensitive natural communities shall be avoided to the greatest extent feasible by limiting disturbance to only the areas necessary to complete the Project.



Mitigation Measure BIO-24: The Project will avoid tree removal to the extent practical. Native or protected trees within the Project footprint that are not designated for removal and at risk of being inadvertently impacted as part of the Project will be fenced or flagged prior to ground disturbing activities with oversight from a qualified biologist.

Mitigation Measure BIO-25: Staging areas shall be located within existing developed areas.

Mitigation Measure BIO-26: Any areas that are temporarily disturbed by Project activities will be restored by seeding/revegetating with habitat appropriate, native species that have been documented within the Study Area. Restoration will be a minimum of 1:1 for areas impacted or as determined through agency review.

The implementation of the Mitigation Measures above will reduce potential impacts to sensitive natural communities to a **less-than-significant** level.

7.3 Aquatic Resources

This section analyzes the Project's potential impacts and mitigation for wetlands and other areas presumed or determined to be within the jurisdiction of the Corps or RWQCB in reference to the significance threshold outlined in CEQA Appendix G, Part IV (c):

c) Does the Project have the potential to have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

7.3.1 Streams and Wetlands

The Study Area supports three sensitive aquatic resources: intermittent stream, ephemeral stream, and iris-leaf rush seeps. These features are within RWQCB and Corps jurisdiction under Section 401 and 404 of the Clean Water Act. Additionally, streams and associated riparian habitat are within CDFW jurisdiction under Section 1602 of the CFGC and RWQCB jurisdiction under the Porter-Cologne Water Quality Control Act. The proposed Project has been intentionally sited to avoid iris-leaf rush seeps but may result in impacts to intermittent and ephemeral streams, as depicted on **Figure 7** and detailed below. Permanent impacts may result from the placement of fill associated with the installation and maintenance of articulated block at low-flow crossings.

Temporary impacts to aquatic resources may result from modification to, or maintenance of, existing crossings. In addition, ephemeral streams that occur along the new trail alignment may be temporarily impacted by equipment during trail grading. The installation of clear span bridge crossings is not anticipated to result in permanent impacts to the channel, since the footings will be placed outside of top of bank (TOB); however, temporary impacts may occur if BMPs are not implemented. Impacts to aquatic resources will require permits with the jurisdictional agencies discussed above. Permanent impacts to aquatic resources are considered **significant** under CEQA.

Impact BIO-16: Equipment operation/mobilization along the trail alignment (where permanent crossings are not proposed) may result in temporary impacts to ephemeral streams during trail construction.



Impact BIO-17: The proposed Project may permanently impact intermittent and ephemeral streams during the maintenance and installation of articulated block at low-flow crossings.

Impact BIO-18: Project activities may result in the unintentional discharge of sediment into sensitive aquatic resources during trail grading, culvert replacement, and trail crossing installation.

As discussed in **Section 1.2 and 7.1.2**, work within aquatic habitats will be restricted to the dry season (June 1 through October 31) when water is not present. In addition, standard construction Best Management Practices (BMPs) will be utilized throughout all work areas where sediment runoff from construction may enter adjacent waters (**Mitigation Measure BIO-11**) and equipment best practices will be implemented to ensure that accidental discharge does not enter waterways (**Mitigation Measure BIO-12**).

The Project will also obtain a Section 404 Permit from the Corps and a Section 401 Water Quality Certification and/or WDR requirements from the RWQCB prior to any impacts to waters of the U.S. and State. In addition, the Project will obtain an LSAA from CDFW prior to impacts to creek banks or riparian habitat. All compliance measures included in these permits will be adhered to.

Based on the preliminary design concepts being considered for each of the five stream crossings, the permanent impact to aquatic features is anticipated to range from 0.0075 to 0.009 acre. At one crossing a dual culvert may be removed and replaced with a structure that is bottomless and allows natural flow, thus removing fill. The small impact anticipated at each crossing would not materially change the aquatic habitat value or hydrologic function of the stream. This impact is not considered a significant impact pursuant to CEQA. The implementation of the Mitigation Measures above will reduce potential impacts to aquatic resources to a **less-than-significant** level.

7.3.2 Essential Fish Habitat

As stated in section 5.4, EFH for Pacific Salmon is present within Stonybrook Creek. As an intermittent stream, there is not suitable habitat to support Chinook salmon spawning or rearing within the stream as it would be dry before juveniles could emigrate. In addition, physical barriers may exist below the Study Area and preclude access by individual fish. However, EFH protects waters and substrates that provide food, cover and water quality above areas where salmon reside.

“Pacific coast salmon EFH includes those waters and substrate necessary for salmon production needed to support a long-term sustainable salmon fishery and salmon contributions to a healthy ecosystem. (PFMC 2022).

“...activities may adversely affect EFH if the activities cause physical, chemical, or biological alterations of the substrate, and loss of or injury to benthic organisms, prey species and their habitat, and other components of the ecosystem (PFMC 2022).



As discussed above, the Project will incorporate measures to protect water quality to ensure that any Project activities within or adjacent to aquatic habitats onsite do not result in impacts to EFH or downstream waters. As such, **no significant impacts** are anticipated.

7.4 Wildlife Corridors and Native Wildlife Nursery Sites

This section analyzes the Project's potential impacts and mitigation for habitat corridors and linkages in reference to the significance threshold outlined in CEQA Appendix G, Part IV (d):

d) Does the Project have the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

As noted in Section 5.3, the Study Area is considered “moderately permeable” by the Essential Connectivity Areas geospatial dataset and provides habitat linkage from Sunol Regional Wilderness in the south all the way up to San Pablo Reserve in the north.

The proposed Project will not alter the ability of the Study Area to facilitate wildlife movement or support nursery sites. The Project footprint comprises a very small portion of the expansive open space in the region. The proposed trail will connect to existing trail alignments and will therefore not significantly alter existing land use in the immediate area. Grading and vegetation removal associated with the Project will be minimal and limited to the proposed trail alignment. As such, Project activities will not significantly alter the vegetative structure of the riparian corridor or impact its ability to provide shelter, cover, and/or breeding habitat for common and special-status species discussed herein. In addition, pedestrian crossings installed over aquatic habitats will not result in barriers to dispersal for aquatic species. Based on these factors, the implementation of the proposed Project is not anticipated to interfere with the movement of terrestrial or aquatic wildlife and will result in a **less than significant impact** to migratory corridors and habitat linkages

7.5 Local Policies and Ordinances

This section analyzes the Project's potential impacts and mitigation based on conflicts with local policies and ordinances in reference to the significance threshold outlined in CEQA Appendix G, Part IV (e):

e) Does the Project have the potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

While there is **no impact** under CEQA for the removal of the trees within the Study Area, and thus no mitigation measure is required, the EBRPD will cooperate with each member agency to determine the number of replacement trees to be planted for each project component in areas where tree replacement is warranted.



7.6 Habitat Conservation Plans

This section analyzes the Project's potential impacts and mitigation based on conflicts with any adopted local, regional, and state habitat conservation plans in reference to the significance threshold outlined in CEQA Appendix G, Part IV (f):

f) Does the Project have the potential to 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 is not within any Habitat Conservation Plan, therefore, there is **no impact**.



8.0 REFERENCES

Alameda Creek Alliance (ACA). 2022. Stonybrook Creek Restoration Progress. Website accessed in June: <http://www.alamedacreek.org/restoration-progress/stonybrook-creek.php> and Email from Jeff Miller to WRA September 1.

Alameda County Water District (ACWD) 2023. Current fish Passage & Related Projects. Available online at: <https://www.acwd.org/456/Current-Fish-Passage-Related-Projects>. Accessed August 2023.

Bobzien, S. and J. E. DiDonato. 2007. The Status of the California Tiger Salamander (*Ambystoma californiense*), California Red-Legged Frog (*Rana draytonii*), Foothill YellowLegged Frog (*Rana boylei*), and Other Aquatic Herpetofauna in the East Bay Regional Park District, California. East Bay Regional Park District.

Bourque, R.M. 2008. Spatial ecology of an inland population of the foothill yellow-legged frog (*Rana boylei*) in Tehama County, California. Master's thesis, Humboldt State University, Arcata, CA

California Department of Fish and Game (CDFG). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607. Environmental Services Division, California Department of Fish and Wildlife, Sacramento, California.

California Department of Fish and Wildlife (CDFW). 2023a. California Natural Community List. Biogeographic Data Branch. Vegetation Classification and Mapping Program, Sacramento, California. August 18.

California Department of Fish and Wildlife (CDFW). 2023b. California Natural Diversity Database. Biogeographic Data Branch, Vegetation Classification and Mapping Program, Sacramento, California. Available online at: <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>; most recently accessed: May 2023.

California Department of Fish and Wildlife (CDFW). 2023c. Biogeographic Information and Observation System. Biogeographic Data Branch. Sacramento, California. Online at: <https://wildlife.ca.gov/Data/BIOS>; most recently accessed: May 2023.

California Native Plant Society (CNPS). 2023a. Rare Plant Inventory (online edition, v9.5). Sacramento, California. Online at: <http://rareplants.cnps.org/>; most recently accessed: July 2023.

California Native Plant Society (CNPS). 2023b. A Manual of California Vegetation, Online Edition. Available online at: <http://vegetation.cnps.org>. Most recently accessed: August 2023.

California Soil Resource Lab (CSRL). 2023. SoilWeb: An online soil resource browser. Online at: <http://casoilresource.lawr.ucdavis.edu/gmap>; most recently accessed: May 2023.

Consortium of California Herbaria 2 (CCH2). 2023. CCH2 Portal. Online at: <http://cch2.org/portal/index.php>; most recently accessed: July 2023.

Cornell Lab of Ornithology. 2023. eBird: An online database of bird distribution and abundance. Ithaca, NY. Available online at: <http://www.ebird.org>. Most recently accessed: May 2023.



Dunk, JR. 1995. White-tailed Kite (*Elanus leucurus*), The Birds of North America Online (A Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/178>.

Environmental Laboratory. 1987. Corp of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Technical Report Y-87-1, Vicksburg, Mississippi.

Google Earth. 2023. Aerial Imagery 1985-2023. Most recently accessed: July 2023.

Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2015. *Bombus crotchii*. The IUCN Red List of Threatened Species 2015: e.T44937582A46440211.

<https://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937582A46440211.en>. Accessed on 09 January 2023.

Hilty, J. A., W. Z. Lidicker Jr, and A. M. Merenlender. 2019. Corridor Ecology: Linking Landscapes for Biodiversity Conservation. Second Edition. Island Press.

Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, Department of Fish and Game, Sacramento, CA.

ICF International (ICF). 2010. Final Draft East Alameda County Conservation Strategy. Prepared for East Alameda County Conservation Strategy Steering Committee. October. Online at: <http://www.eastalco-conservation.org/documents.html>

Kochert, M., K. Steenhof, C. McIntyre, E. Craig. 2002. Golden Eagle (*Aquila chrysaetos*). Pp.1-44 in A. Poole, F. Gill, eds. The Birds of North America, Vol. 684. Philadelphia: The Birds of North America.

Lake, D. 2023. Rare, Unusual, and Significant Plants of Alameda and Contra Costa Counties (web application). Berkeley, California: East Bay Chapter of the California Native Plant Society. Online at: <https://rareplants.ebcnps.org/>; most recently accessed: July 2023.

Lind, A.J., and B.H. Sheffer. 2005. Reintroduction of a declining amphibian: Determining an ecologically feasible approach for the foothill yellow-legged frog (*Rana boylei*) through analysis of decline factors, genetic structure, and habitat associations. Dissertation Abstracts International. Section B: Physical Sciences and Engineering: 66(4) 1853.

Long, C. A. 1973. *Taxidea taxus*. American Society of Mammalogy, Mammalian Species No. 26. 4 pp.

Matocq, M. 2003. Dusky-footed Woodrats (*Neotoma fuscipes*) at Hastings: A Research Tradition. Hastings Natural History Reservation. Available online: <http://www.hastingsreserve.org/Woodrats/DFwoodrats.html>

Mersel, M. K., and R. Lichvar. 2014. A guide to ordinary high water mark (OHWM) delineation for non-perennial streams in the western mountains, valleys, and coast region of the United States. Cold Regions Research and Engineering Laboratory (US).

National Marine Fisheries Service (NMFS). 2017. Endangered Species Act Section 7(a)(2) Biological Opinion and Magnuson-Stevens. Fishery Conservation and Management Act Essential



Fish Habitat Response for the Joint Lower Alameda Creek Fish Passage Improvements Project in Fremont, California (Corps File No. 2013-00083S). NMFS File Number SWR-2013-9696.

National Marine Fisheries Service (NMFS). 2012. Final Recovery Plan for Central California Coast coho salmon Evolutionarily Significant Unit. National Marine Fisheries Service, Southwest Region, Santa Rosa, California.

National Marine Fisheries Service (NMFS). 2023. Essential Fish Habitat Mapper. Available online at: <https://www.habitat.noaa.gov/apps/efhmapper/>. Most recently accessed: May 2023.

Nationwide Environmental Title Research (NETR). 2023. Historic Aerials. Available online at: <https://historicaerials.com/viewer>. Most recently accessed: July 2023.

NatureServe. 2023. NatureServe Conservation Status. Available online at: <http://explorer.natureserve.org/ranking.htm>. Most recently accessed: July 2023.

National Oceanic and Atmospheric Administration (NOAA). 2022. National Oceanic and Atmospheric Administration. Essential Fish Habitat Mapper: Pacific. Available online at: https://www.habitat.noaa.gov/apps/efhmapper/?page=page_4. Accessed: May 2023.

Pacific Fishery Management Council (PFMC). 2022. PACIFIC COAST SALMON FISHERY MANAGEMENT PLAN. Dated December 2022.

Pierson, E.D., W.E. Rainey and C. Corben. 2006. Distribution and status of Western red bats (*Lasiurus blossevillei*) in California. Calif. Dept. Fish and Game, Habitat Conservation Planning Branch, Species Conservation and Recovery Program Report 2006-04, Sacramento, CA 45 pp.

Rathbun, GB, NJ Scott, Jr., and TG Murphey. 2002. Terrestrial habitat use by Pacific pond turtles in a Mediterranean climate. *The Southwestern Naturalist* 47: 225-235.

Rathbun, GB, N Seipel and DC Holland. 1992. Nesting behavior and movements of western pond turtles, *Clemmys marmorata*. *The Southwestern Naturalist* 37: 319-324.

San Francisco Estuary Institute (SFEI). 2017, December 28. California Aquatic Resource Inventory (CARI) version 0.3. Available online at: <https://www.sfei.org/data/california-aquatic-resource-inventory-cari-version-03-gis-data#sthash.9SjW0wBH.dpbs>. Most recently accessed: August 2023.

Shuford, W. D., and T. Gardali, eds. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

State Water Resources Control Board (SWRCB). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, May 14, 2019.

Stebbins, R. C. 2003. A Field Guide to Western Reptiles and Amphibians, Third edition. Houghton Mifflin Company, Boston, MA and New York, NY.



Thomson, R. C., A. N. Wright, and H. B. Shaffer. 2016. California amphibian and reptile species of special concern. Co-published by the California Department of Fish and Wildlife and University of California Press, Oakland, California.

U.S. Army Corps of Engineers (Corps). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Page 135. U.S. Army Engineer Research and Development Center, ERDC/EL TR-08-28, Vicksburg, Mississippi.

U.S. Army Corps of Engineers (Corps). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Cost Region (Version 2.0). May.

U.S. Department of Agriculture (USDA). 1966. Soil Survey of Alameda County, California. Soil Conservation Service and Forest Service. In cooperation with the University of California Agricultural Experiment Station.

U.S. Department of Agriculture (USDA). 2023 National List of Hydric Soils. Natural Resources Conservation Service. Online at: https://efotg.sc.egov.usda.gov/references/Public/IL/State_List_NRCS_Hydric_Soils_Report_Dynamic_Data.html; most recently accessed: June 2023.

U.S. Fish and Wildlife Service (USFWS). 2000. Endangered and threatened wildlife and plants; final determination of critical habitat for the Alameda Whipsnake (*Masticophis lateralis euryxanthus*). (65:192 FR October 3, 2000).

U.S. Fish and Wildlife Service (USFWS). 2010. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-Legged Frog; Final Rule. Federal Register 75(51): 12816-12959.

U.S. Fish and Wildlife Service (USFWS). 2023a. National Wetlands Inventory. Available online at: <http://www.fws.gov/nwi>. Most recently accessed: August 2023.

U.S. Fish and Wildlife Service (USFWS). 2023b. Information for Planning and Consultation. Available online at: <https://ecos.fws.gov/ipac/>. Most recently accessed: May 2023.

U.S. Geological Survey (USGS). 2021 Dublin Quadrangle, California. 7.5-minute topographic map.

Wiens, J.D., Kolar, P.S., Fuller, M.R., Hunt, W.G., and Hunt, Teresa , 2015, Estimation of occupancy, breeding success, and predicted abundance of golden eagles (*Aquila chrysaetos*) in the Diablo Range, California, 2014: U.S. Geological Survey Open-File Report 2015-1039, 23 p., <http://dx.doi.org/10.3133/ofr20151039>.

Western Bat Working Group (WBWG). 2023. Western Species Accounts. Available online at: <http://wbwg.org/western-bat-species/>. Most recently accessed: May 2023.

Williams, P.H., R.W. Thorp, L.L. Richardson, and S.R. Colla. 2014. Bumble bees of North America: an Identification Guide. Princeton University Press. 208 pp.

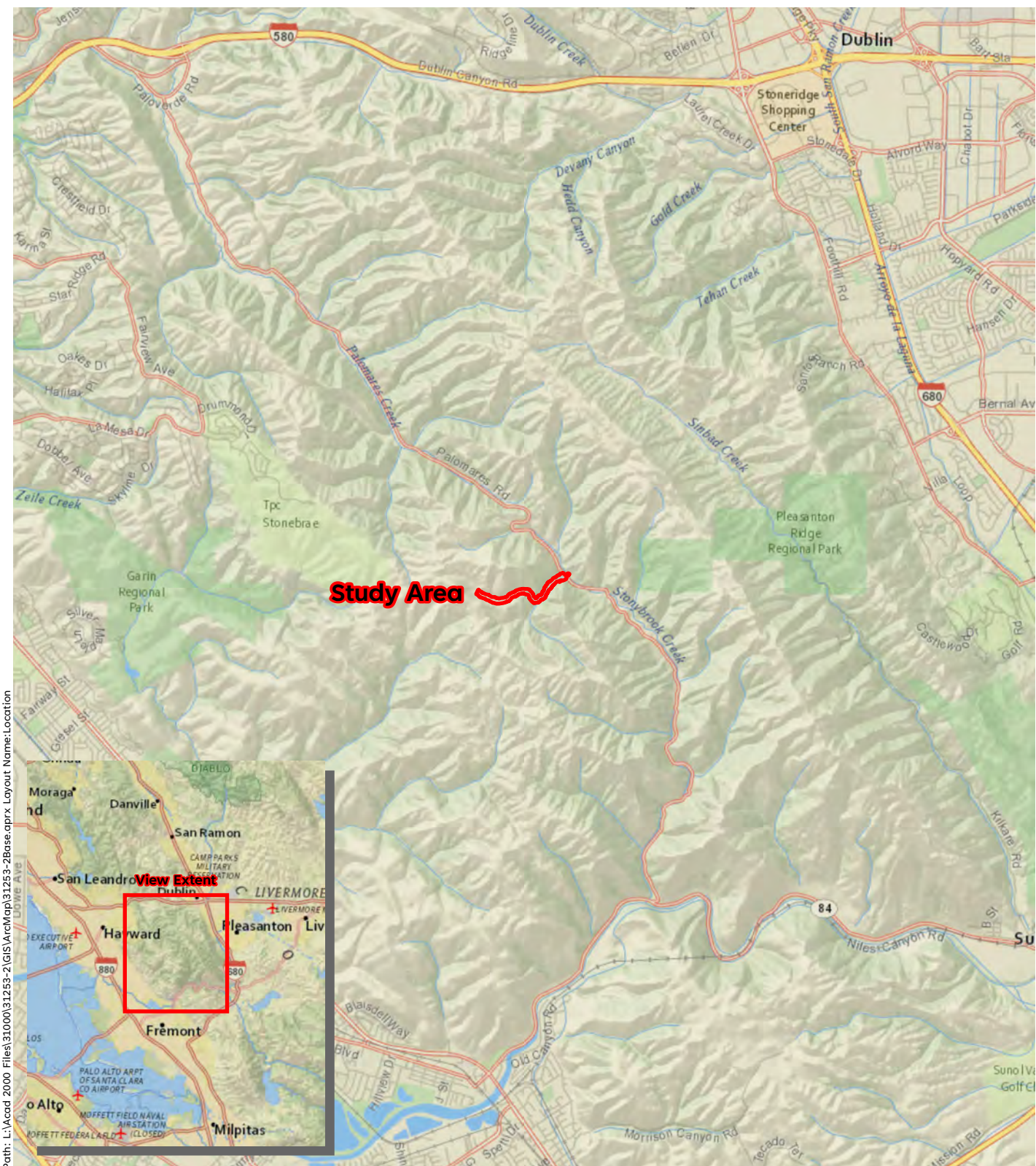
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APPENDIX A. FIGURES



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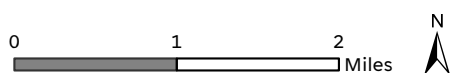


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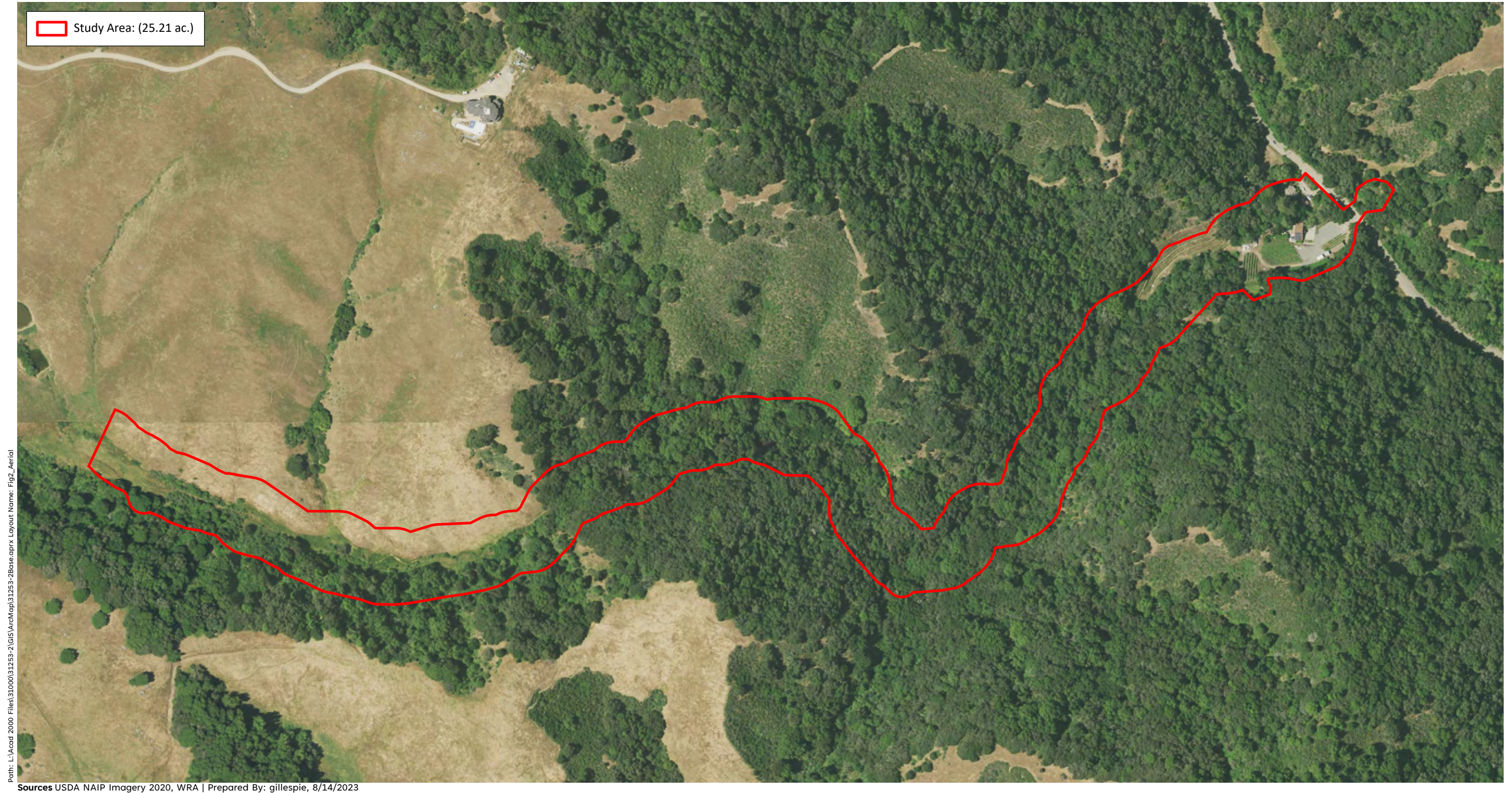
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Figure 1. Study Area Regional Location Map

Garin to Pleasanton Ridge Public Access Project
Union City, CA



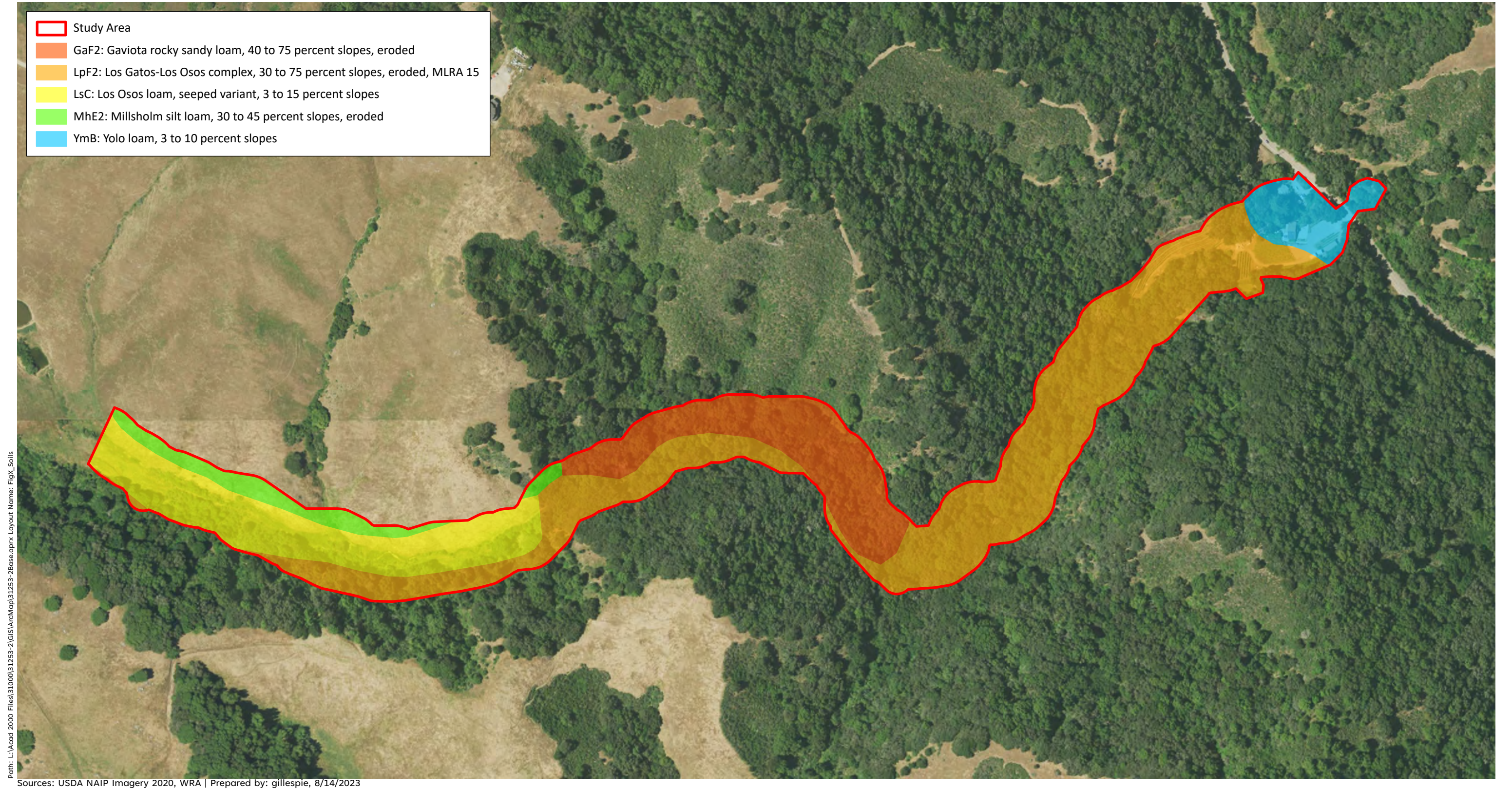
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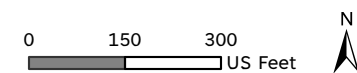
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Figure 2. Aerial Site Map



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Garin to Pleasanton Ridge Public Access Project
Union City



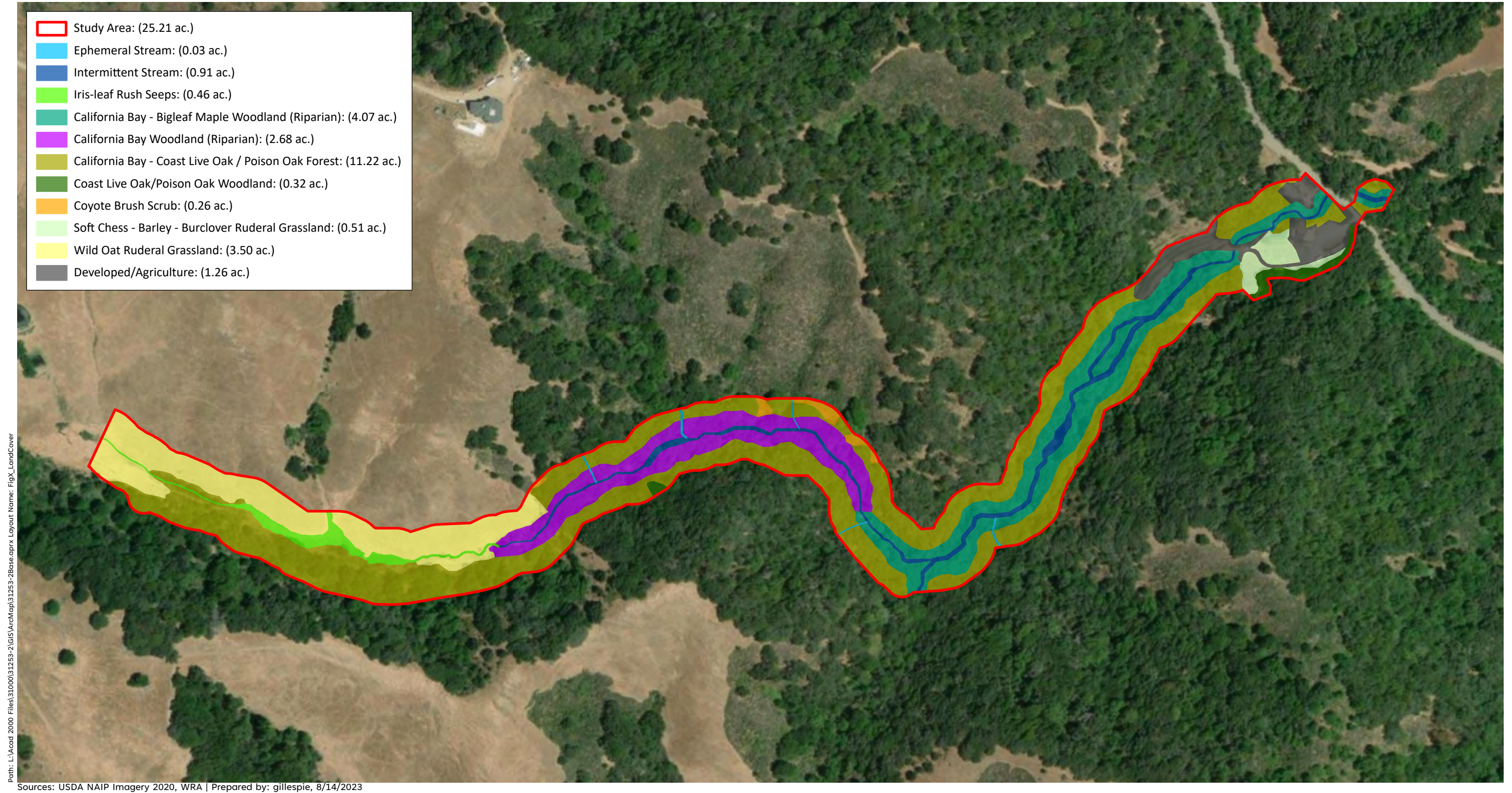


Figure 4. Land Cover Types

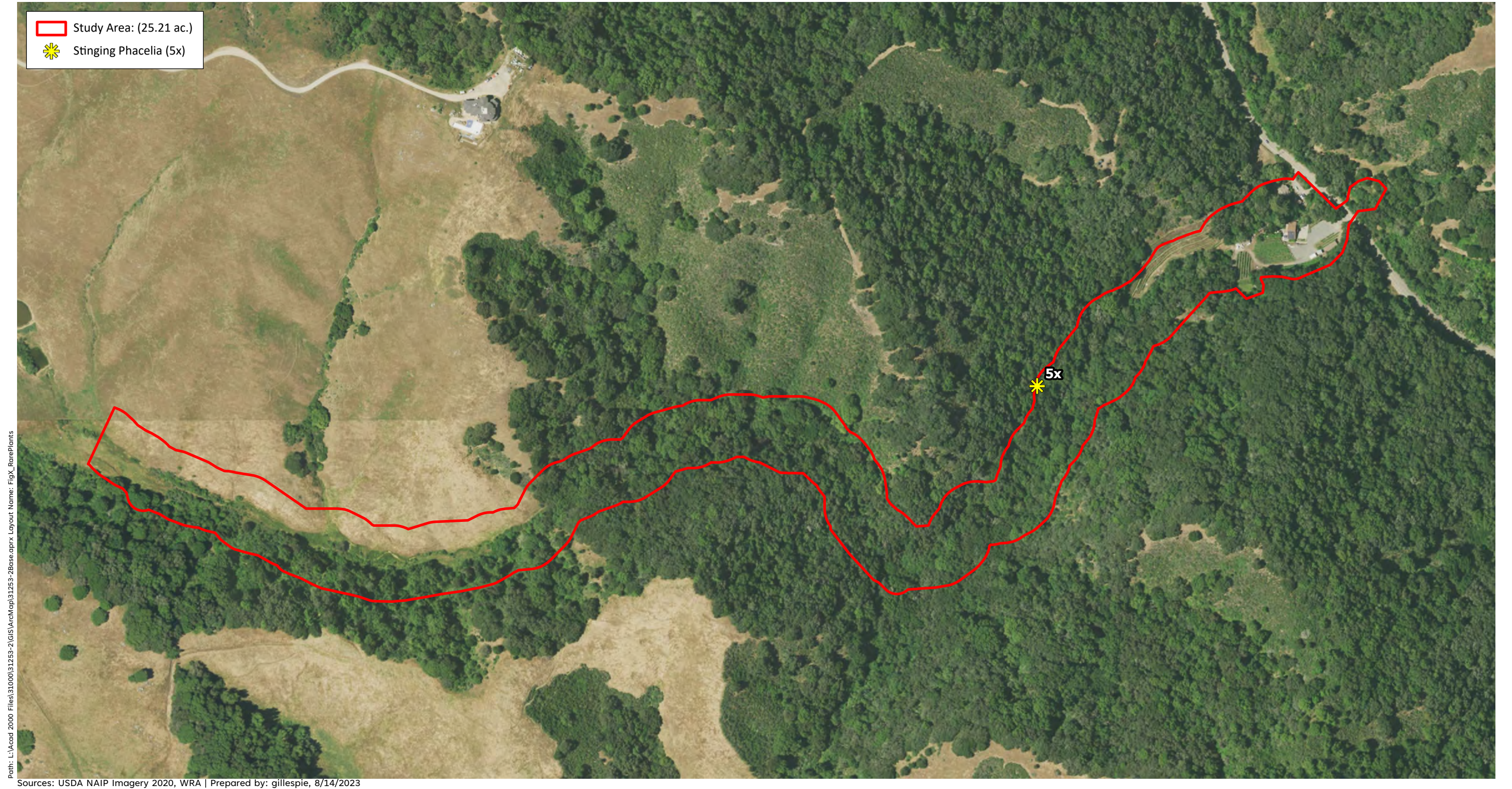
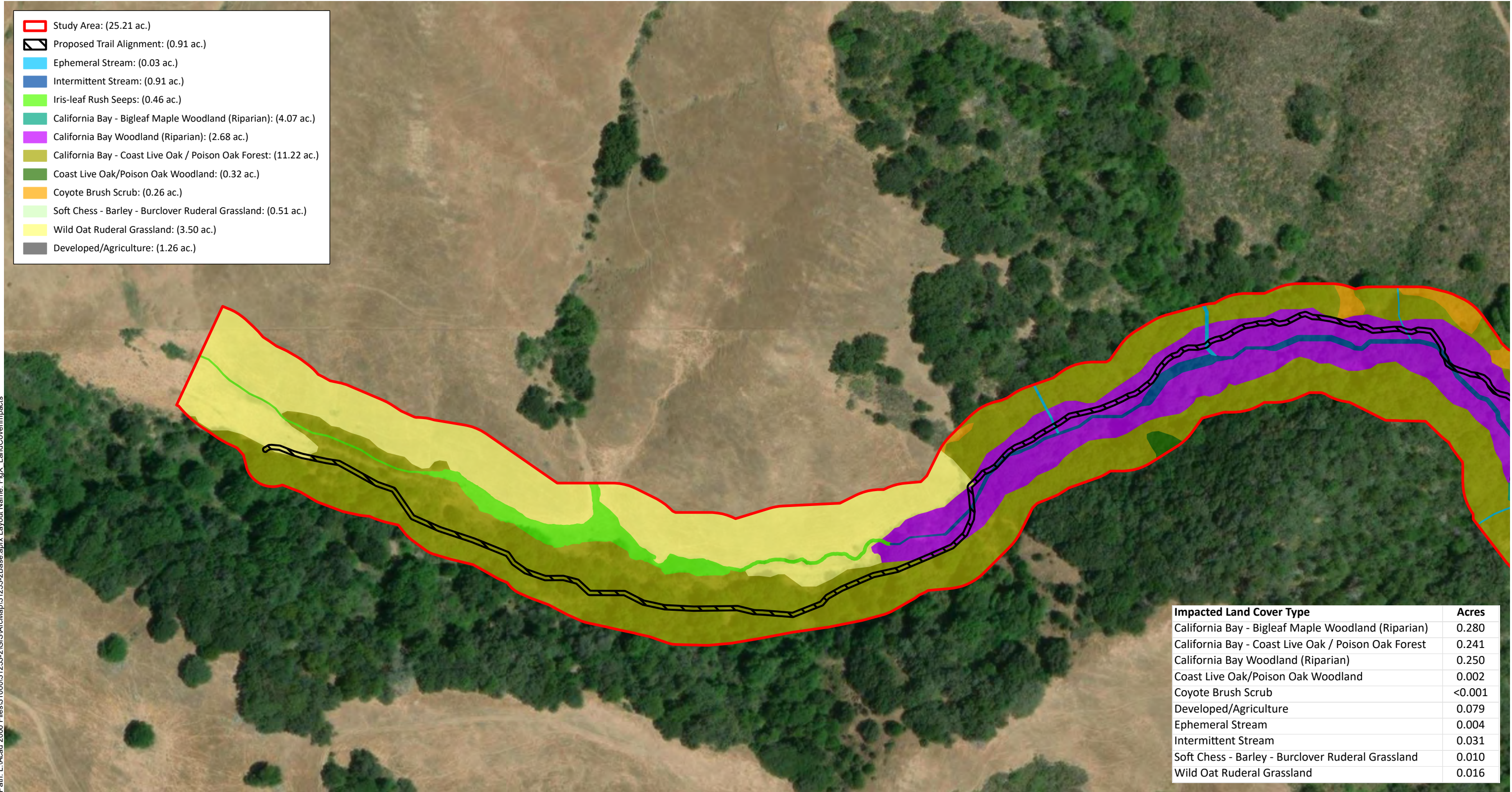


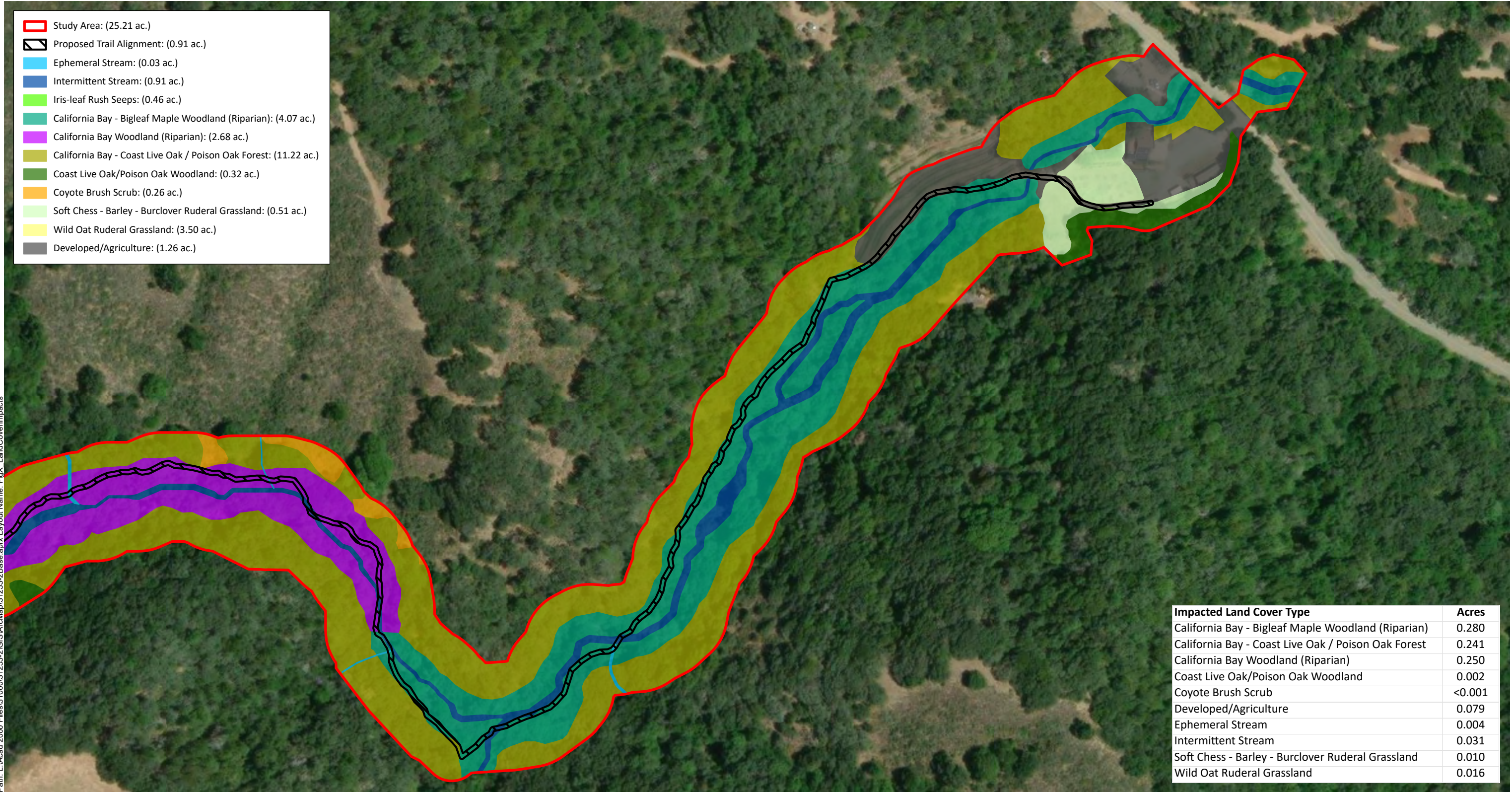
Figure 5. Rare Plants



Figure 6. Critical Habitat



i r 7. Proposed Impacts to Land Cover Types



i r 7. Proposed Impacts to Land Cover Types

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APPENDIX B. SPECIES OBSERVED IN AND AROUND THE STUDY AREA



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Appendix B-1. Plant species observed within and around the Study Area on May 4 and June 1, 2023 and August 8, 2024.

SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Acer macrophyllum</i>	Bigleaf maple	native	tree	-	-	FAC	-
<i>Achillea millefolium</i>	Yarrow	native	perennial herb	-	-	FACU	-
<i>Adelinia grandis</i>	Pacific Hound's tongue	native	perennial herb	-	-	-	-
<i>Adiantum jordanii</i>	California maidenhair fern	native	fern	-	-	FAC	-
<i>Aesculus californica</i>	Buckeye	native	tree	-	-	-	-
<i>Agoseris grandiflora</i>	Giant mountain dandelion	native	perennial herb	-	-	-	-
<i>Arbutus menziesii</i>	Madrone	native	tree	-	-	-	-
<i>Artemisia douglasiana</i>	California mugwort	native	perennial herb	-	-	FAC	-
<i>Athyrium filix-femina</i> var. <i>cyclosorum</i>	Western lady fern	native	fern	-	-	FAC	-
<i>Avena barbata</i>	Slim oat	non-native (invasive)	annual, perennial grass	-	Moderate	-	-
<i>Avena fatua</i>	Wildoats	non-native (invasive)	annual grass	-	Moderate	-	-
<i>Baccharis pilularis</i>	Coyote brush	native	shrub	-	-	-	-
<i>Barbarea orthoceras</i>	Winter cress	native	perennial herb	-	-	FACW	-
<i>Bromus diandrus</i>	Ripgut brome	non-native (invasive)	annual grass	-	Moderate	-	-
<i>Bromus hordeaceus</i>	Soft chess	non-native (invasive)	annual grass	-	Limited	FACU	-



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Bromus laevipes</i>	Narrow flowered brome	native	annual, perennial grass	-	-	-	-
<i>Bromus sitchensis</i> var. <i>carinatus</i>	California brome	native	perennial grass	-	-	-	-
<i>Calochortus albus</i>	White fairy lantern	native	perennial herb	-	-	-	-
<i>Capsella bursa-pastoris</i>	Shepherd's purse	non-native	annual herb	-	-	FACU	-
<i>Cardamine californica</i>	Bitter cress	native	perennial herb	-	-	-	-
<i>Cardamine hirsuta</i>	Hairy bitter cress	non-native	annual herb	-	-	FACU	-
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	non-native (invasive)	annual herb	-	Moderate	-	-
<i>Carex cf. globosa</i>	Round fruit sedge	native	perennial grasslike herb	-	-	-	-
<i>Carex cf. subbracteata</i>	Small bract sedge	native	perennial grasslike herb	-	-	FACW	-
<i>Cerastium glomeratum</i>	Large mouse ears	non-native	annual herb	-	-	UPL	-
<i>Chlorogalum pomeridianum</i>	Amole	native	perennial herb	-	-	-	-
<i>Clarkia unguiculata</i>	Woodland clarkia	native	annual herb	-	-	-	-
<i>Claytonia parviflora</i>	Narrow leaved miner's lettuce	native	annual herb	-	-	FACU	-
<i>Claytonia perfoliata</i>	Miner's lettuce	native	annual herb	-	-	FAC	-
<i>Clinopodium douglasii</i>	Yerba buena	native	perennial herb	-	-	FACU	-
<i>Conium maculatum</i>	Poison hemlock	non-native (invasive)	perennial herb	-	Moderate	FACW	-



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Convolvulus arvensis</i>	Field bindweed	non-native	perennial herb, vine	-	-	-	-
<i>Corylus cornuta</i> ssp. <i>californica</i>	Beaked hazelnut	native	shrub	-	-	FACU	-
<i>Crepis vesicaria</i> ssp. <i>taraxacifolia</i>	Weedy hawksbeard	non-native	annual, perennial herb	-	-	-	-
<i>Cynosurus echinatus</i>	Dogtail grass	non-native (invasive)	annual grass	-	Moderate	-	-
<i>Cyperus eragrostis</i>	Tall cyperus	native	perennial grasslike herb	-	-	FACW	-
<i>Deschampsia elongata</i>	Hairgrass	native	perennial grass	-	-	FACW	-
<i>Diplacus aurantiacus</i>	Sticky monkeyflower	native	shrub	-	-	FACU	-
<i>Dipterostemon capitatus</i> ssp. <i>capitatus</i>	Wild hyacinth	native	perennial herb	-	-	FACU	-
<i>Dryopteris arguta</i>	Wood fern	native	fern	-	-	-	-
<i>Elymus glaucus</i>	Blue wildrye	native	perennial grass	-	-	FACU	-
<i>Epilobium brachycarpum</i>	Panicled willow herb	native	annual herb	-	-	FAC	-
<i>Epipactis helleborine</i>	Helleborine	non-native	perennial herb	-	-	FACU	-
<i>Erodium botrys</i>	Big heron bill	non-native	annual herb	-	-	FACU	-
<i>Erodium cicutarium</i>	Red stemmed filaree	non-native (invasive)	annual herb	-	Limited	-	-
<i>Erodium moschatum</i>	Whitestem filaree	non-native	annual herb	-	-	-	-
<i>Erythranthe guttata</i>	Seep monkeyflower	native	perennial herb (rhizomatous)	-	-	OBL	-



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Eschscholzia californica</i>	California poppy	native	annual, perennial herb	-	-	-	-
<i>Festuca bromoides</i>	Brome fescue	non-native	annual grass	-	-	FACU	-
<i>Festuca myuros</i>	Rattail sixweeks grass	non-native (invasive)	annual grass	-	Moderate	FACU	-
<i>Fragaria vesca</i>	Wild strawberry	native	perennial herb			UPL	
<i>Frangula californica</i>	California coffeeberry	native	shrub	-	-	-	-
<i>Fritillaria affinis</i>	Checker lily	native	perennial herb (bulb)	-	-	-	-
<i>Galium aparine</i>	Cleavers	native	annual herb	-	-	FACU	-
<i>Galium porrigens</i>	Climbing bedstraw	native	vine, shrub	-	-	-	-
<i>Geranium dissectum</i>	Wild geranium	non-native (invasive)	annual herb	-	Limited	-	-
<i>Geranium molle</i>	Crane's bill geranium	non-native	annual, perennial herb	-	-	-	-
<i>Geranium purpureum</i>	Herb robert	non-native (invasive)	annual, biennial herb	-	Limited	-	-
<i>Glyceria declinata</i>	Waxy mannagrass	non-native (invasive)	perennial grass	-	Moderate	FACW	-
<i>Heracleum maximum</i>	Common cowparsnip	native	perennial herb	-	-	FACW	-
<i>Holodiscus discolor</i>	Oceanspray	native	shrub	-	-	FACU	-
<i>Hordeum murinum</i>	Foxtail barley	non-native (invasive)	annual grass	-	Moderate	FACU	-
<i>Juncus mexicanus</i>	Mexican rush	native	perennial grasslike herb	-	-	FACW	-



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Juncus occidentalis</i>	Western rush	native	perennial grasslike herb	-	-	FACW	-
<i>Juncus patens</i>	Common rush	native	perennial grasslike herb	-	-	FACW	-
<i>Juncus xiphioides</i>	Iris leaved rush	native	perennial grasslike herb	-	-	OBL	-
<i>Lathyrus vestitus</i>	Common pacific pea	native	perennial herb	-	-	-	-
<i>Lepidium nitidum</i>	Shining pepper grass	native	annual herb	-	-	FAC	-
<i>Linum bienne</i>	Narrow-leaved flax	non-native	annual herb	-	-	-	-
<i>Lithophragma affine</i>	Common woodland star	native	perennial herb	-	-	-	-
<i>Lonicera hispidula</i>	Pink honeysuckle	native	vine, shrub	-	-	FACU	-
<i>Lunaria annua</i>	Annual moonwort	non-native	annual, perennial herb	-	-	-	-
<i>Lupinus bicolor</i>	Miniature lupine	native	annual, perennial herb	-	-	-	-
<i>Lupinus latifolius</i> var. <i>latifolius</i>	Broad leaf lupine	native	perennial herb	-	-	FACW	-
<i>Madia gracilis</i>	Gumweed	native	annual herb	-	-	-	-
<i>Maianthemum racemosum</i>	Feathery false lily of the valley	native	perennial herb	-	-	FAC	-
<i>Maianthemum stellatum</i>	Starry false lily of the valley	native	perennial herb	-	-	FACU	-
<i>Marah fabacea</i>	California man-root	native	perennial herb, vine	-	-	-	-
<i>Matricaria discoidea</i>	Pineapple weed	native	annual herb	-	-	FACU	-
<i>Medicago polymorpha</i>	Bur clover	non-native (invasive)	annual herb	-	Limited	FACU	-



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Melica imperfecta</i>	Coast Range melic	native	perennial grass	-	-	-	-
<i>Myosotis latifolia</i>	Wide leaved forget me not	non-native (invasive)	perennial herb	-	Limited	-	-
<i>Nasturtium officinale</i>	Watercress	native	perennial herb (aquatic)	-	-	OBL	-
<i>Nemophila heterophylla</i>	Canyon nemophila	native	annual herb	-	-	-	-
<i>Oemleria cerasiformis</i>	Oso berry	native	shrub	-	-	FACU	-
<i>Osmorhiza berteroi</i>	Sweetcicely	native	perennial herb	-	-	FACU	-
<i>Oxalis pes-caprae</i>	Bermuda buttercup	non-native (invasive)	perennial herb	-	Moderate	-	-
<i>Pellaea andromedifolia</i>	Coffee fern	native	fern	-	-	-	-
<i>Phacelia malvifolia</i> var. <i>malvifolia</i>	Stinging phacelia	native	annual herb	-	-	-	A2
<i>Plantago lanceolata</i>	Ribwort	non-native (invasive)	perennial herb	-	Limited	FAC	-
<i>Platanus racemosa</i>	California sycamore	native	tree	-	-	FAC	-
<i>Plectritis congesta</i> ssp. <i>brachystemon</i>	Shortspur seablush	native	annual herb	-	-	FACU	-
<i>Poa annua</i>	Annual blue grass	non-native	annual grass	-	-	FAC	-
<i>Poa palustris</i>	Fowl bluegrass	non-native	perennial grass	-	-	FAC	-
<i>Polypodium californicum</i>	California polypody	native	fern	-	-	-	-
<i>Prosartes hookeri</i>	Drops of gold	native	perennial herb	-	-	-	-
<i>Prunus cerasifera</i>	Cherry plum	non-native (invasive)	tree	-	Limited	-	-



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Prunus virginiana</i> var. <i>demissa</i>	Western choke cherry	native	tree, shrub	-	-	FAC	-
<i>Pseudognaphalium californicum</i>	Ladies' tobacco	native	annual, perennial herb	-	-	-	-
<i>Psilocarphus tenellus</i>	Slender woolly heads	native	annual herb	-	-	OBL	-
<i>Pteridium aquilinum</i> var. <i>pubescens</i>	Western bracken fern	native	fern	-	-	FACU	-
<i>Quercus agrifolia</i>	Coast live oak	native	tree	-	-	-	-
<i>Rafinesquia californica</i>	California chicory	native	annual herb	-	-	-	-
<i>Ranunculus californicus</i> var. <i>californicus</i>	Common buttercup	native	perennial herb	-	-	FACU	-
<i>Raphanus sativus</i>	Wild radish	non-native (invasive)	annual, biennial herb	-	Limited	-	-
<i>Ribes californicum</i>	California gooseberry	native	shrub	-	-	-	-
<i>Rosa californica</i>	California wild rose	native	shrub	-	-	FAC	-
<i>Rosa gymnocarpa</i>	Wood rose	native	shrub	-	-	FACU	-
<i>Rubus armeniacus</i>	Himalayan blackberry	non-native (invasive)	shrub	-	High	FAC	-
<i>Rubus parviflorus</i>	Thimbleberry	native	vine, shrub	-	-	FAC	-
<i>Rubus ursinus</i>	California blackberry	native	vine, shrub	-	-	FAC	-
<i>Rumex acetosella</i>	Sheep sorrel	non-native (invasive)	perennial herb	-	Moderate	FACU	-
<i>Rumex crispus</i>	Curly dock	non-native (invasive)	perennial herb	-	Limited	FAC	-



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Rupertia physodes</i>	Common rupertia	native	perennial herb	-	-	-	-
<i>Salix lasiolepis</i>	Arroyo willow	native	tree, shrub	-	-	FACW	-
<i>Sambucus mexicana</i>	Blue elderberry	native	shrub	-	-	FACU	-
<i>Sanicula crassicaulis</i>	Pacific sanicle	native	perennial herb	-	-	-	-
<i>Scandix pecten- veneris</i>	Shepherd's needle	non-native	annual herb, vine	-	-	-	-
<i>Scrophularia californica</i>	California bee plant	native	perennial herb	-	-	FAC	-
<i>Scutellaria tuberosa</i>	Danny's skullcap	native	perennial herb	-	-	-	-
<i>Senecio vulgaris</i>	Common groundsel	non-native	annual herb	-	-	FACU	-
<i>Sherardia arvensis</i>	Field madder	non-native	annual herb	-	-	-	-
<i>Silene gallica</i>	Common catchfly	non-native	annual herb	-	-	-	-
<i>Silybum marianum</i>	Milk thistle	non-native (invasive)	annual, perennial herb	-	Limited	-	-
<i>Sisyrinchium bellum</i>	Blue eyed grass	native	perennial herb	-	-	FACW	-
<i>Sonchus asper</i> ssp. <i>asper</i>	Prickly sow thistle	non-native	annual herb	-	-	FAC	-
<i>Sonchus oleraceus</i>	Common sow thistle	non-native	annual herb	-	-	UPL	-
<i>Spergularia rubra</i>	Purple sand spurry	non-native	annual, perennial herb	-	-	FAC	-
<i>Stachys rigida</i> var. <i>quercetorum</i>	Rough hedgenettle	native	perennial herb	-	-	FACW	-
<i>Stellaria media</i>	Chickweed	non-native	annual herb	-	-	FACU	-
<i>Symphoricarpos albus</i> var. <i>laevigatus</i>	Common snowberry	native	shrub	-	-	FACU	-



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
<i>Symphoricarpos mollis</i>	Creeping snowberry	native	shrub	-	-	FACU	-
<i>Taraxacum officinale</i>	Red seeded dandelion	non-native	perennial herb	-	-	FACU	-
<i>Taraxia ovata</i>	Sun cup	native	perennial herb	-	-	-	-
<i>Thalictrum fendleri</i> var. <i>polycarpum</i>	Torrey's meadow rue	native	perennial herb	-	-	FAC	-
<i>Torilis arvensis</i>	Field hedge parsley	non-native (invasive)	annual herb	-	Moderate	-	-
<i>Trifolium dubium</i>	Shamrock	non-native	annual herb	-	-	UPL	-
<i>Trifolium subterraneum</i>	Subterranean clover	non-native	annual herb	-	-	-	-
<i>Trifolium willdenovii</i>	Tomcat clover	native	annual herb	-	-	FACW	-
<i>Triphysaria pusilla</i>	Little owl's clover	native	annual herb	-	-	-	-
<i>Triteleia laxa</i>	Ithuriel's spear	native	perennial herb	-	-	-	-
<i>Umbellularia californica</i>	California bay	native	tree	-	-	FAC	-
<i>Urtica dioica</i>	Stinging nettle	native	perennial herb	-	-	FAC	-
<i>Verbena lasiostachys</i>	Western vervain	native	perennial herb	-	-	FAC	-
<i>Vicia sativa</i>	Spring vetch	non-native	annual herb, vine	-	-	FACU	-
<i>Vitis vinifera</i>	Cultivated grape	non-native	vine, shrub	-	-	-	-
<i>Wyethia helenioides</i>	Gray mule ears	native	perennial herb	-	-	-	-
Note: All species identified using the <i>Jepson eFlora</i> [Jepson Flora Project (eds.) 2023]; nomenclature follows <i>Jepson eFlora</i> [Jepson Flora Project (eds.) 2023] or Rare Plant Inventory (CNPS 2023). Sp.: "species", intended to indicate that the observer was confident in the identity of the genus but uncertain which species.							



SCIENTIFIC NAME	COMMON NAME	ORIGIN	FORM	STATEWIDE RARITY STATUS ¹	CAL-IPC STATUS ²	WETLAND STATUS ³	LOCAL RARITY STATUS
¹ California Native Plant Society. 2023. Rare Plant Inventory (online edition, v9.5). Sacramento, California. Online at: http://rareplants.cnps.org/ ; most recently accessed: July 2023.							
	FE:	Federal Endangered					
	FT:	Federal Threatened					
	SE:	State Endangered					
	ST:	State Threatened					
	SR:	State Rare					
	Rank 1A:	Plants presumed extinct in California					
	Rank 1B:	Plants rare, threatened, or endangered in California and elsewhere					
	Rank 2:	Plants rare, threatened, or endangered in California, but more common elsewhere					
	Rank 3:	Plants about which we need more information – a review list					
	Rank 4:	Plants of limited distribution – a watch list					
² California Invasive Plant Council. 2023. California Invasive Plant Inventory Database. California Invasive Plant Council, Berkeley, CA. Online at: http://www.cal-ipc.org/paf/ ; most recently accessed: July 2023.							
	High:	Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically.					
	Moderate:	Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limited-moderate distribution ecologically					
	Limited:	Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically					
	Assessed:	Assessed by Cal-IPC and determined to not be an existing current threat					
³ U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH. Online at: http://wetland-plants.usace.army.mil/							
	OBL:	Almost always found in wetlands					
	FACW:	Usually found in wetlands					
	FAC:	Equally found in wetlands and uplands					
	FACU:	Usually not found in wetlands					
	UPL:	Almost never found in wetlands					
	NL:	Not listed, assumed almost never found in wetlands					
	NI:	No information; not factored during wetland delineation					
⁴ Lake, D [compiler]. 2023. Rare, Unusual, and Significant Plants of Alameda and Contra Costa Counties (web application). Berkeley, California: East Bay Chapter of the California Native Plant Society. Online at: https://rareplants.ebcnps.org/ ; most recently accessed: July 2023.							
	A1:	Locally Rare Species. Species occurring in two or fewer regions in Alameda and Contra Costa counties					
	A1x:	Locally Rare Species. Species presumed extirpated from Alameda and Contra Costa counties					
	A1?:	Locally Rare Species. Species possibly occurring in Alameda and Contra Costa counties. Identification or location is uncertain					
	A2:	Locally Rare Species. Plants occurring in three to five regions or are otherwise threatened in Alameda and Contra Costa counties.					
	B:	High Priority Watch List. Plants occurring in six to nine regions in Alameda and Contra Costa counties.					
	C:	Second Priority Watch List. Plants occurring in ten to fifteen regions in Alameda and Contra Costa counties.					
	*:	Ranks preceded by an asterisk (e.g. “*A1”) also have a statewide rarity ranking					



Appendix B-2. Wildlife species observed within and around the Study Area on May 4, 2023.

WILDLIFE		
SCIENTIFIC NAME	COMMON NAME	STATUS ⁴
BIRDS		
<i>Junco hyemalis</i>	dark-eyed junco	No status
<i>Pipilo maculatus</i>	spotted towhee	No status
<i>Haemorhous mexicanus</i>	house finch	No status
<i>Calypte anna</i>	Anna's hummingbird	No status
<i>Aphelocoma californica</i>	California scrub-jay	No status
<i>Turdus migratorius</i>	American robin	No status
<i>Cyanocitta stelleri</i>	Steller's jay	No status
<i>Vireo gilvus</i>	warbling vireo	No status
<i>Carellina pusilla</i>	Wilson's warbler	No status
<i>Empidonax difficilis</i>	pacific-slope flycatcher	No status
<i>Corvus brachyrhynchos</i>	American crow	No status
<i>Melospiza crissalis</i>	California towhee	No status
<i>Spinus psaltria</i>	lesser goldfinch	No status
<i>Sayornis nigricans</i>	black phoebe	No status
<i>Leiopythys celata</i>	orange-crowned warbler	No status
<i>Buteo lineatus</i>	red-shouldered hawk	No status
<i>Poecile rufescens</i>	chestnut-backed chickadee	No status
<i>Thryomanes bewickii</i>	Bewick's wren	No status
<i>Passerina amoena</i>	lazuli bunting	No status
<i>Chamaea fasciata</i>	wrentit	No status
<i>Dryobates nuttallii</i>	Nuttall's woodpecker	No status
<i>Colaptes auratus</i>	northern flicker	No status
<i>Baeolophus inornatus</i>	oak titmouse	No status
<i>Myiarchus cinerascens</i>	ash-throated flycatcher	No status
<i>Buteo jamaicensis</i>	red-tailed hawk	No status
<i>Troglodytes aedon</i>	house wren	No status
REPTILES AND AMPHIBIANS		



WILDLIFE		
<i>Rana draytonii</i>	California red-legged frog	FT, CDFW SSC
<i>Taricha torosa</i>	California newt	No status
<i>Batrachoseps attenuatus</i>	California slender salamander	No status
MAMMALS		
<i>Thomomys bottae</i>	Botta's pocket gopher	No status
<i>Otospermophilus beecheyi</i>	California ground squirrel	No status
CDFW = California Department of Fish and Wildlife. ⁴Status FD: Federal Delisted FE: Federal Endangered FT: Federal Threatened SD: State Delisted SE: State Endangered SSC: Species of Special Concern ST: State Threatened SR: State Rare CFP: California Fully Protected		



APPENDIX C. SPECIAL-STATUS SPECIES POTENTIAL TABLE



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Appendix C. Potential for Special Status Plant and Wildlife Species to Occur within the Study Area. List Compiled from the California Department of Fish and Wildlife Natural Diversity Database (CDFW 2023b), U.S. Fish and Wildlife Service Information for Planning and Consultation Species Lists (USFWS 2023), and California Native Plant Society Rare Plant Inventory (CNPS 2023) search of the Dublin and surrounding eight USGS 7.5' quadrangles.

SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
PLANTS				
Santa Clara thorn-mint <i>Acanthomintha lanceolata</i>	Rank 4.2	Chaparral (often serpentine), cismontane woodland, coastal scrub. Elevation ranges from 260 to 3935 feet (80 to 1200 meters). Blooms Mar-Jun.	No Potential. Chaparral habitat and serpentine substrate are absent from the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
large-flowered fiddleneck <i>Amsinckia grandiflora</i>	FE, SE, Rank 1B.1	Cismontane woodland, valley and foothill grassland. Elevation ranges from 885 to 1805 feet (270 to 550 meters). Blooms (Mar)Apr-May.	No Potential. This species is restricted to grassy areas on very steep, north-facing slopes, and such habitat is absent from the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
bent-flowered fiddleneck <i>Amsinckia lunaris</i>	Rank 1B.2	Cismontane woodland, coastal bluff scrub, valley and foothill grassland. Elevation ranges from 10 to 1640 feet (3 to 500 meters). Blooms Mar-Jun.	Moderate Potential. The Study Area contains grassland with the potential to support this species. A reference sighting of this species, within Alameda County, on the day of the protocol-level species survey confirmed the species was in bloom and readily identifiable.	Not Observed. Not Present. This species was not observed within grasslands during the May or June 2023 plant surveys. No further surveys are recommended for this species.
California androsace <i>Androsace elongata</i> ssp. <i>acuta</i>	Rank 4.2	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, valley and foothill grassland. Elevation ranges from 490 to 4280 feet (150 to 1305 meters). Blooms Mar-Jun.	Unlikely. Although the Study Area contains woodlands, grasslands, and coastal scrub, this species is unlikely to occur within the Study Area due to lack of open, rocky or sparsely vegetated areas required to support this species. The closest occurrence is from 1925, 7 miles southeast of the Study Area (CDFW 2023b).	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
slender silver moss <i>Anomobryum julaceum</i>	Rank 4.2	Broadleafed upland forest, lower montane coniferous forest, north coast coniferous forest. Elevation ranges from 330 to 3280 feet (100 to 1000 meters).	Unlikely. This species typically occurs on sandstone that is usually seasonally wet, though sometimes perennially wet, in areas that are sunny for at least part of the day, and such habitat is absent from the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Mt. Diablo manzanita <i>Arctostaphylos auriculata</i>	Rank 1B.3	Chaparral (sandstone), cismontane woodland. Elevation ranges from 445 to 2135 feet (135 to 650 meters). Blooms Jan-Mar.	Unlikely. Although the Study Area contains woodland habitat, it does not contain sandstone necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Contra Costa manzanita <i>Arctostaphylos manzanita</i> ssp. <i>laevigata</i>	Rank 1B.2	Chaparral (rocky). Elevation ranges from 1410 to 3610 feet (430 to 1100 meters). Blooms Jan-Mar(Apr).	No Potential. The Study Area does not contain rocky chaparral habitat.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
alkali milk-vetch <i>Astragalus tener</i> var. <i>tener</i>	Rank 1B.2	Playas, valley and foothill grassland (adobe clay), vernal pools. Elevation ranges from 5 to 195 feet (1 to 60 meters). Blooms Mar-Jun.	No Potential. The Study Area does not contain playas, vernal pools, or adobe clay grasslands necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
crownscale <i>Atriplex coronata</i> var. <i>coronata</i>	Rank 4.2	Chenopod scrub, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 1935 feet (1 to 590 meters). Blooms Mar-Oct.	No Potential. Although the Study Area contains grasslands, this species is usually found in clay, alkaline soil, which was not present. Additionally, the Study Area does not contain chenopod scrub or playas.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
brittlescale <i>Atriplex depressa</i>	Rank 1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 1050 feet (1 to 320 meters). Blooms Apr-Oct.	No Potential. Although the Study Area contains grasslands, this species is usually found in clay, alkaline soil, which was not present. Additionally, the Study Area does not contain chenopod scrub or playas.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
lesser saltscale <i>Atriplex minuscula</i>	Rank 1B.1	Chenopod scrub, playas, valley and foothill grassland. Elevation ranges from 50 to 655 feet (15 to 200 meters). Blooms May-Oct.	No Potential. Although the Study Area contains grassland, this species is usually found in sandy, alkaline soil, which was not present. Additionally, the Study Area does not contain chenopod scrub or playas.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
big-scale balsamroot <i>Balsamorhiza macrolepis</i>	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 150 to 5100 feet (45 to 1555 meters). Blooms Mar-Jun.	Moderate Potential. The Study Area contains woodlands and grasslands with potential to support this species. A reference sighting of this species, within Alameda County, on the day of the protocol-level species survey confirmed the species was in bloom and readily identifiable.	Not Observed. Not Present. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Brewer's calandrinia <i>Calandrinia breweri</i>	Rank 4.2	Chaparral, coastal scrub. Elevation ranges from 35 to 4005 feet (10 to 1220 meters). Blooms (Jan)Mar-Jun.	Unlikely. This species is more typically associated with disturbance, such as burns, in chaparral habitat, and such situations are absent from the Study Area. There are no observations of this species in Alameda County (CCH2 2023).	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Mt. Diablo fairy-lantern <i>Calochortus pulchellus</i>	Rank 1B.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. Elevation ranges from 100 to 2755 feet (30 to 840 meters). Blooms Apr-Jun.	Unlikely. Although the Study Area contains woodland and grassland, this species' known range is concentrated in Contra Costa County near Mount Diablo, 16 miles northeast of the Study Area. There are two occurrences within Alameda County in 1990 and 1989 near Mount Diablo and Las Trampas (12 miles north of the Study Area) (CDFW 2023b).	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Oakland star-tulip <i>Calochortus umbellatus</i>	Rank 4.2	Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 330 to 2295 feet (100 to 700 meters). Blooms Mar-May.	Moderate Potential. The Study Area contains grasslands and woodland with openings with potential to support this species. A reference sighting of this species, within Alameda County, on the day of the protocol-level species survey confirmed the species was in bloom and readily identifiable.	Not Observed. Not Present. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>congdonii</i>	Rank 1B.1	Valley and foothill grassland (alkaline). Elevation ranges from 0 to 755 feet (0 to 230 meters). Blooms May-Oct(Nov).	Moderate Potential. The Study Area contains grassland slopes that may be suitable for this species.	Not Observed. This species was not observed during plant surveys conducted in May and June 2023 and August 2024. No further surveys are recommended for this species.
Point Reyes salty bird's-beak <i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Rank 1B.2	Marshes and swamps (coastal salt). Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Jun-Oct.	No Potential. Additionally, the Study Area does not contain coastal salt marshes or swamps necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
palmate-bracted bird's-beak <i>Chloropyron palmatum</i>	FE, SE, Rank 1B.1	Chenopod scrub, valley and foothill grassland. Elevation ranges from 15 to 510 feet (5 to 155 meters). Blooms May-Oct.	No Potential. This species is restricted to strongly alkaline habitats, such as alkali scalds, and such habitat is absent from the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Santa Clara red ribbons <i>Clarkia concinna</i> ssp. <i>automixa</i>	Rank 4.3	Chaparral, cismontane woodland. Elevation ranges from 295 to 4920 feet (90 to 1500 meters). Blooms (Apr)May-Jun(Jul).	Moderate Potential. The Study Area contains potentially suitable woodland and forest habitats.	Not Observed. This species was not observed during the May or June 2023 plant surveys.
Hospital Canyon larkspur <i>Delphinium californicum</i> ssp. <i>interius</i>	Rank 1B.2	Chaparral (openings), cismontane woodland (mesic), coastal scrub. Elevation ranges from 640 to 3595 feet (195 to 1095 meters). Blooms Apr-Jun.	Unlikely. Although the Study Area contains woodland and scrub habitats, this species is typically associated with open, rocky habitats, which are nearly absent from the Study Area. The nearest occurrence of this species is approximately 11	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
			miles southeast of the Study Area.	
Mt. Diablo buckwheat <i>Eriogonum truncatum</i>	Rank 1B.1	Chaparral, coastal scrub, valley and foothill grassland. Elevation ranges from 10 to 1150 feet (3 to 350 meters). Blooms Apr-Sep(Nov-Dec).	Unlikely. Although grassland and scrub habitat are present, this species is known from dry, exposed, erosive sandy or clay substrates, and such substrate is absent from the Study Area. The nearest occurrence of this species is greater than 10 miles northeast of the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
bay buckwheat <i>Eriogonum umbellatum</i> var. <i>bahiiforme</i>	Rank 4.2	Cismontane woodland, lower montane coniferous forest. Elevation ranges from 2295 to 7220 feet (700 to 2200 meters). Blooms Jul-Sep.	Unlikely. This species is known from open, very rocky sites, typically on serpentine substrate, and such conditions are absent from the Study Area. The nearest occurrence of this species is approximately 10 miles southeast of the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Jepson's woolly sunflower <i>Eriophyllum jepsonii</i>	Rank 4.3	Chaparral, cismontane woodland, coastal scrub. Elevation ranges from 655 to 3365 feet (200 to 1025 meters). Blooms Apr-Jun.	Unlikely. Although the Study Area contains potentially suitable open grassland and woodland, the nearest occurrence of this species is approximately 12 miles southeast of the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Hoover's button-celery <i>Eryngium aristulatum</i> var. <i>hooveri</i>	Rank 1B.1	Vernal pools. Elevation ranges from 10 to 150 feet (3 to 45 meters). Blooms (Jun)Jul(Aug).	No Potential. The Study Area does not contain vernal pools necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Jepson's coyote-thistle <i>Eryngium jepsonii</i>	Rank 1B.2	Valley and foothill grassland, vernal pools. Elevation ranges from 10 to 985 feet (3 to 300 meters). Blooms Apr-Aug.	No Potential. The Study Area does not contain vernal pools necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.



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San Joaquin spearscale <i>Extriplex joaquinana</i>	Rank 1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. Elevation ranges from 5 to 2740 feet (1 to 835 meters). Blooms Apr-Oct.	No Potential. The Study Area does not contain alkaline substrate.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
stinkbells <i>Fritillaria agrestis</i>	Rank 4.2	Chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Elevation ranges from 35 to 5100 feet (10 to 1555 meters). Blooms Mar-Jun.	Unlikely. Although the Study Area contains grassland and woodland openings, clay substrate is absent, and the nearest occurrence of this species is approximately 15 miles east of the Study Area, on the far side of the Livermore Valley.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
fragrant fritillary <i>Fritillaria liliacea</i>	Rank 1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 10 to 1345 feet (3 to 410 meters). Blooms Feb-Apr.	Moderate Potential. The Study Area contains potentially suitable grassland and woodland opening habitats.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
phlox-leaf serpentine bedstraw <i>Galium andrewsii</i> ssp. <i>gatense</i>	Rank 4.2	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 490 to 4755 feet (150 to 1450 meters). Blooms Apr-Jul.	No Potential. This species is restricted to serpentine substrate, which is absent from the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Diablo helianthella <i>Helianthella castanea</i>	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Elevation ranges from 195 to 4265 feet (60 to 1300 meters). Blooms Mar-Jun.	Moderate Potential. The Study Area contains woodlands, woodlands and grasslands with the potential to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Brewer's western flax <i>Hesperolinon breweri</i>	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 100 to 3100 feet (30 to 945 meters). Blooms May-Jul.	No Potential. This species is known from serpentine substrate, which is absent from the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Loma Prieta hoita <i>Hoita strobilina</i>	Rank 1B.1	Chaparral, cismontane woodland, riparian woodland. Elevation ranges	No Potential. This species is known from serpentine	Not Observed. This species was not observed during the



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
		from 100 to 2820 feet (30 to 860 meters). Blooms May-Jul(Aug-Oct).	substrate, which is absent from the Study Area.	May or June 2023 plant surveys. No further surveys are recommended for this species.
Santa Cruz tarplant <i>Holocarpha macradenia</i>	FT, SE, Rank 1B.1	Coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 35 to 720 feet (10 to 220 meters). Blooms Jun-Oct.	Unlikely. Although grassland habitat is present in the Study Area, all known Bay Area natural populations of this species have been extirpated (although there are reintroduced populations in Wildcat Canyon Regional Park in Contra Costa County. The nearest extant natural populations are in Santa Cruz County.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Southern California black walnut <i>Juglans californica</i>	Rank 4.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevation ranges from 165 to 2955 feet (50 to 900 meters). Blooms Mar-Aug.	No Potential. The Study Area is far outside of the range of this species, which is restricted to Southern California. The few Bay Area records of this species are old and vague and are likely actually records of Northern California black walnut (<i>Juglans hindsii</i>), which used to be considered a variety of <i>J. californica</i> .	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE, Rank 1B.1	Cismontane woodland, playas (alkaline), valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1540 feet (0 to 470 meters). Blooms Mar-Jun.	No Potential. The Study Area does not contain vernal pools necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Ferris' goldfields <i>Lasthenia ferrisiae</i>	Rank 4.2	Vernal pools (alkaline, clay). Elevation ranges from 65 to 2295 feet (20 to 700 meters). Blooms Feb-May.	No Potential. The Study Area does not contain vernal pools necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
serpentine leptosiphon <i>Leptosiphon ambiguus</i>	Rank 4.2	Cismontane woodland, coastal scrub, valley and foothill grassland. Elevation ranges from 395 to 3710	No Potential. The Study Area does not contain serpentine	Not Observed. This species was not observed during the May or June 2023 plant



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
		feet (120 to 1130 meters). Blooms Mar-Jun.	substrate necessary to support this species.	surveys. No further surveys are recommended for this species.
bristly leptosiphon <i>Leptosiphon aureus</i>	Rank 4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 180 to 4920 feet (55 to 1500 meters). Blooms Apr-Jul.	High Potential. This species has the potential to grow within grassland and woodland openings in the far western portion of the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
large-flowered leptosiphon <i>Leptosiphon grandiflorus</i>	Rank 4.2	Cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 15 to 4005 feet (5 to 1220 meters). Blooms Apr-Aug.	Unlikely. Although the Study Area contains woodland openings and grasslands, this species is usually associated with sandy or gravelly substrates, which are not present in the above habitats. Additionally, there are not extant occurrences of this species in the 9-quad area surrounding the Study Area, and only one historic occurrence from 1866.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Hall's bush-mallow <i>Malacothamnus hallii</i>	Rank 1B.2	Chaparral, coastal scrub. Elevation ranges from 35 to 2495 feet (10 to 760 meters). Blooms (Apr)May-Sep(Oct).	Unlikely. This species is typically associated with chaparral habitat, which is absent from the Study Area, and the nearest occurrence of this species is 15 miles north of the Study Area on Mt. Diablo.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
woodland woollythreads <i>Monolopia gracilens</i>	Rank 1B.2	Broadleafed upland forest (openings), chaparral (openings), cismontane woodland, north coast coniferous forest (openings), valley and foothill grassland. Elevation ranges from 330 to 3935 feet (100 to 1200 meters). Blooms (Feb)Mar-Jul.	Unlikely. Although the Study Area contains woodland openings and grassland, this species is more commonly associated with chaparral habitat or serpentine substrate, which are absent from the Study Area. The nearest occurrence of this species is 16 miles northeast of the Study Area on Mt. Diablo.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Tehama navarretia <i>Navarretia heterandra</i>	Rank 4.3	Valley and foothill grassland (mesic), vernal pools. Elevation ranges from 100 to 3315 feet (30 to 1010 meters). Blooms Apr-Jun.	No Potential. The Study Area does not contain mesic grassland or vernal pools necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
prostrate vernal pool navarretia <i>Navarretia prostrata</i>	Rank 1B.2	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools. Elevation ranges from 10 to 3970 feet (3 to 1210 meters). Blooms Apr-Jul.	No Potential. The Study Area does not contain alkaline substrate or vernal pool habitat.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Mt. Diablo phacelia <i>Phacelia phacelioides</i>	Rank 1B.2	Chaparral, cismontane woodland. Elevation ranges from 1640 to 4495 feet (500 to 1370 meters). Blooms Apr-May.	Unlikely. Although the Study Area contains woodland, rock outcrops are not fully sunny, and talus is absent. The nearest occurrence of this species is 15 miles north of the Study Area on Mt. Diablo.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Michael's rein orchid <i>Piperia michaelii</i>	Rank 4.2	Chaparral, cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal scrub, lower montane coniferous forest. Elevation ranges from 10 to 3000 feet (3 to 915 meters). Blooms Apr-Aug.	Moderate Potential. Although the Study Area does not contain coastal environs and coniferous forest, this species has the potential to occur in the woodland and forest areas within the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
hairless popcornflower <i>Plagiobothrys glaber</i>	Rank 1A	Marshes and swamps (coastal salt), meadows and seeps (alkaline). Elevation ranges from 50 to 590 feet (15 to 180 meters). Blooms Mar-May.	No Potential. The Study Area does not contain coastal salt marshes and swamps or alkaline meadows and seeps necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Oregon polemonium <i>Polemonium carneum</i>	Rank 2B.2	Coastal prairie, coastal scrub, lower montane coniferous forest. Elevation ranges from 0 to 6005 feet (0 to 1830 meters). Blooms Apr-Sep.	Unlikely. The Study Area does not contain coastal prairie or lower montane coniferous forest necessary to support this species. Scrub habitat present is typically dense and likely to be too dense to support this species. There is a historic	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
			record with a vague location from Stonybrook Creek, but there are no modern records from the region. Except for a recent observation of a plant at Point Reyes National Seashore that may have been planted, there are no modern observations of this species outside of far northern California.	
California alkali grass <i>Puccinellia simplex</i>	Rank 1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 3050 feet (2 to 930 meters). Blooms Mar-May.	No Potential. Although the Study Area contains scrub species and grassland, it does not contain vernal pools or meadows and seeps or alkaline substrate necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Lobb's aquatic buttercup <i>Ranunculus lobbii</i>	Rank 4.2	Cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms Feb-May.	Moderate Potential. This species has the potential to occur within standing water and vegetated pools along the western portion of the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
chaparral harebell <i>Ravenella exigua</i>	Rank 1B.2	Chaparral (rocky, usually serpentine). Elevation ranges from 900 to 4100 feet (275 to 1250 meters). Blooms May-Jun.	No Potential. The Study Area does not contain rocky, serpentine chaparral necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
chaparral ragwort <i>Senecio aphanactis</i>	Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Elevation ranges from 50 to 2625 feet (15 to 800 meters). Blooms Jan-Apr(May).	No Potential. This species is known from alkaline and/or vertic clay substrate, which are absent from the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
long-styled sand-spurrey <i>Spergularia macrotheca</i> var. <i>longistyla</i>	Rank 1B.2	Marshes and swamps, meadows and seeps. Elevation ranges from 0 to 835 feet (0 to 255 meters). Blooms Feb-May.	No Potential. The Study Area does not marshes and swamps or meadows and seeps or	Not Observed. This species was not observed during the May or June 2023 plant



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
			alkaline substrate necessary to support this species..	surveys. No further surveys are recommended for this species.
most beautiful jewelflower <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 310 to 3280 feet (95 to 1000 meters). Blooms (Mar)Apr-Sep(Oct).	No Potential. Although the Study Area contains grassland, it does not contain serpentine substrate which is necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
Mt. Diablo jewelflower <i>Streptanthus hispidus</i>	Rank 1B.3	Chaparral, valley and foothill grassland. Elevation ranges from 1200 to 3935 feet (365 to 1200 meters). Blooms Mar-Jun.	No Potential. Rocky or talus slopes in open areas are absent from the Study Area. Additionally, this species is restricted to Mount Diablo, 16 miles northeast of the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
northern slender pondweed <i>Stuckenia filiformis</i> ssp. <i>alpina</i>	Rank 2B.2	Marshes and swamps (shallow freshwater). Elevation ranges from 985 to 7055 feet (300 to 2150 meters). Blooms May-Jul.	No Potential. The Study Area does not freshwater marshes and swamps necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
California seablite <i>Suaeda californica</i>	FE, Rank 1B.1	Marshes and swamps (coastal salt). Elevation ranges from 0 to 50 feet (0 to 15 meters). Blooms Jul-Oct.	No Potential. The Study Area does not contain coastal salt marshes and swamps necessary to support this species. Additionally, the Study Area is outside of the elevation range for this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
saline clover <i>Trifolium hydrophilum</i>	Rank 1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. Elevation ranges from 0 to 985 feet (0 to 300 meters). Blooms Apr-Jun.	No Potential. Although the Study Area contains grasslands, they are not alkaline. Additionally, the Study Area does not contain vernal pools, marshes, or swamps necessary to support this species.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
coastal triquetrella <i>Triquetrella californica</i>	Rank 1B.2	Coastal bluff scrub, coastal scrub. Elevation ranges from 35 to 330 feet (10 to 100 meters).	Unlikely. This species is known from thin, sparsely vegetated soils. Such conditions are only present in the far eastern part of the Study Area associated	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
			with the former vineyard facilities, but the level of disturbance there is too high to support this species.	
caper-fruited tropidocarpum <i>Tropidocarpum capparideum</i>	Rank 1B.1	Valley and foothill grassland (alkaline hills). Elevation ranges from 5 to 1495 feet (1 to 455 meters). Blooms Mar-Apr.	Unlikely. Although the Study Area contains grassland, it does not contain alkaline hills necessary to support this species. The nearest occurrence of this species is on Mt. Diablo, 16 miles north of the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
oval-leaved viburnum <i>Viburnum ellipticum</i>	Rank 2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 705 to 4595 feet (215 to 1400 meters). Blooms May-Jun.	Unlikely. Chaparral and coniferous forest habitats are absent from the Study Area, and woodland habitat is limited in extent. The nearest occurrences of this species are 16 miles north of the Study Area.	Not Observed. This species was not observed during the May or June 2023 plant surveys. No further surveys are recommended for this species.
WILDLIFE				
MAMMALS				
Pallid bat <i>Antrozous pallidus</i>	CDFW Species of Special Concern WBWG High Priority	Found in a variety of habitats ranging from grasslands to mixed forests, favoring open and dry, rocky areas. Roost sites include crevices in rock outcrops and cliffs, caves, mines, hollow trees, and various manmade structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Moderate Potential. The nearest documented occurrence of this species is approximately 3 mile south in 2017 (CDFW 2023b). The Study Area does not provide man-made structures or suitable rock outcrops; however, large trees with hollows may provide potential roost sites. Additionally, mixed woodland, forest, and annual grassland habitat within the Study Area are suitable for foraging. Intermittent streams within the Study Area provide a reliable water source	See Mitigation Measures BIO-21 and BIO-22 for bat avoidance.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	CDFW Species of Special Concern WBWG High Priority	Associated with a wide variety of habitats from deserts to higher-elevation mixed and coniferous forests. Females form maternity colonies in buildings, caves and mines, and males roost singly or in small groups. Foraging typically occurs at edge habitats near wooded areas, e.g., along streams.	Unlikely. The nearest documented occurrence of this species is 5 miles east (CDFW 2023b). The Study Area does not provide adequate roosting habitat for the species such as caves or mines; however, the species may occasionally forage along intermittent streams within the Study Area.	See Mitigation Measures BIO-21 and BIO-22 for bat avoidance.
Western mastiff bat <i>Eumops perotis californicus</i>	CDFW Species of Special Concern WBWG High Priority	Found in a wide variety of open, arid and semi-arid habitats. Distribution appears to be tied to large rock structures which provide suitable roosting sites, including cliff crevices and cracks in boulders.	Unlikely. The Study Area does not contain adequate roosting habitat for the species, such as cliffs or rock crevices. However, this species may occasionally forage within mixed woodland and grassland habitat within the Study Area and immediate vicinity.	See Mitigation Measures BIO-21 and BIO-22 for bat avoidance.
Western red bat <i>Lasiurus blossevillii</i>	CDFW Species of Special Concern WBWG High Priority	Highly migratory and typically solitary, roosting primarily in the foliage of trees or shrubs. Roosts are usually in broad-leaved trees including cottonwoods, sycamores, alders, and maples. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas.	High Potential. The Study Area contains large trees and foliage that may support roosting. Additionally, the Study Area provides a mosaic of suitable foraging habitat with tree cover, open areas, and edge habitat suitable for foraging. Intermittent streams within the Study Area provide a reliable water source.	See Mitigation Measures BIO-21 and BIO-22 for bat avoidance.
Hoary bat <i>Lasiurus cinereus</i>	WBWG Medium Priority	Prefers open forested habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths.	High Potential. The Study Area contains large trees and foliage that may support roosting. Additionally, the Study Area provides a mosaic of suitable foraging habitat with tree cover, open areas, and edge habitat suitable for foraging.	See Mitigation Measures BIO-21 and BIO-22 for bat avoidance.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
			Intermittent streams within the Study Area provide a reliable water source.	
San Francisco dusky-footed woodrat <i>Neotoma fuscipes annectens</i>	CDFW Species of Special Concern	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	Present. The Study Area contains California bay and Coast live oak woodland habitats that provide ample nest-building materials. Several woodrat nest structures were observed within the Study Area during the site visit on May 4, 2023.	A preconstruction survey for woodrats is recommended prior to vegetation removal or ground disturbance (see Mitigation Measures BIO-2 and BIO-13).
Salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	Federal Endangered California Endangered CDFW Fully Protected	Endemic to emergent salt and brackish wetlands of the San Francisco Bay Estuary. Pickleweed marshes are primary habitat; also occurs in various other wetland communities with dense vegetation. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.	No Potential. The Study Area does not contain any salt or brackish wetlands that can support this species.	No further actions are recommended for this species.
Salt-marsh wandering shrew <i>Sorex vagrans halicoetes</i>	CDFW Species of Special Concern	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6 to 8 feet above sea level where abundant driftwood is scattered among Salicornia.	No Potential. The Study Area does not contain any salt or brackish wetlands that can support this species.	No further actions are recommended for this species.
American badger <i>Taxidea taxus</i>	CDFW Species of Special Concern	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	Moderate Potential. Suitable open grassland habitat is present within and immediately adjacent to the Study Area. Gopher activity on the hillsides indicates that prey species are present. No badger burrows were observed during the site visit on May 4, 2023.	A survey for badger dens shall occur 48 hours prior to the initiation of any ground disturbance, as described in Mitigation Measure BIO-17 .



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	Federal Endangered California Threatened	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.	Unlikely. The Study Area does not contain loose-textured sandy soils and occurs outside the known range for this species.	No further actions are recommended for this species.
Mountain lion <i>Puma concolor</i>	State Candidate (central coast and southern CA)	Ranging from Chile to British Columbia, and adapting to virtually any habitat that contains its primary prey sources of deer and other large mammals. Widespread, yet uncommon in much of its range, and rarely seen.	Moderate Potential. Mountain lions may utilize the Study Area for hunting or movement given that the Study Area provides sufficient cover habitat, presumably supports prey populations, and occurs within a larger matrix of diverse habitat types including chaparral, grasslands, riparian corridors, and forested areas.	See Discussion in Sections 5.3 and 7.4. Project activities are not anticipated to alter the ability of the Study Area to facilitate mountain lion movement and hunting activities. No further actions are recommended for this species.
BIRDS				
Tricolored blackbird <i>Agelaius tricolor</i>	California Threatened CDFW Species of Special Concern	Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas essential.	Unlikely. The Study Area does not contain suitable habitat to support this species. Streams and Iris-leaf Rush Seeps within the Study Area do not provide dense emergent vegetation to support breeding colonies.	No further actions are recommended for this species.
Golden eagle <i>Aquila chrysaetos</i>	CDFW Fully Protected	Occurs year-round in rolling foothills, mountain areas, sage-juniper flats, and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also nests in large trees, usually within otherwise open areas.	Moderate Potential. The Study Area does not contain cliff-walled canyons; however, large trees within the Study Area and immediate vicinity may provide nesting habitat. Foraging habitat is present within adjacent grasslands. This species has been documented	If vegetation removal or ground disturbance occur during the nesting bird season (generally February 1 – September 15), then a preconstruction nesting bird survey shall be conducted per Mitigation Measure BIO-19.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
			nesting approximately 2 miles northwest of the Study Area (CNDDB 2023a).	Seasonal trail closures may also be required, per Mitigation Measure BIO-20 .
Burrowing owl <i>Athene cunicularia</i>	CDFW Species of Special Concern	Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation, perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.	Unlikely. Some ground squirrel activity was observed on the open hillside north of the Study Area; however, the steep canyons of the interior Coast Range are not typical for this species. No suitable burrows were observed within the Study Area. This species may be observed in migration or occasional foraging in habitats closer to the San Francisco Bay.	No further actions are recommended for this species.
Western snowy plover <i>Charadrius nivosus nivosus</i>	Federal Threatened CDFW Species of Special Concern	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	No Potential. The Study Area does not contain any tidal sandy beaches, salt ponds, or alkali lakes that can support this species.	No further actions are recommended for this species.
Northern harrier <i>Circus hudsonius</i>	CDFW Species of Special Concern	Year-round resident and winter visitor. Found in open habitats including grasslands, prairies, marshes and agricultural areas. Nests on the ground in dense vegetation, typically near water or otherwise moist areas. Preys on small vertebrates.	Unlikely. Suitable nesting habitat does not occur within the Study Area. Grasslands within and adjacent to the Study Area may support nesting and foraging; however, the livestock grazing regime may minimize nesting potential.	No further actions are recommended for this species.
Yellow rail <i>Coturnicops noveboracensis</i>	CDFW Species of Special Concern	Summer resident in eastern Sierra Nevada in Mono County, breeding in shallow freshwater marshes and wet meadows with dense vegetation. Also a rare winter visitor along the coast and other	No Potential. The Study Area does not contain any marsh or other suitable habitat. In addition, this species is a rare visitor to the region.	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
		portions of the state. Extremely cryptic.		
White-tailed kite <i>Elanus leucurus</i>	CDFW Fully Protected	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	Present. This species is known to occur within the Study Area and immediate vicinity (CDFW 2023b, comms with EBRPD). Suitable nest trees are present throughout the Study Area and adjacent grassland provides suitable foraging habitat for this species.	If vegetation removal or ground disturbance occur during the nesting bird season (generally February 1 – September 15), then a preconstruction nesting bird survey shall be conducted per Mitigation Measure BIO-19.
American peregrine falcon <i>Falco peregrinus anatum</i>	Federal Delisted California Delisted CDFW Fully Protected	Year-round resident and winter visitor. Occurs in a wide variety of habitats, though often associated with coasts, bays, marshes and other bodies of water. Nests on protected cliffs and also on man-made structures including buildings and bridges. Preys on birds, especially waterbirds. Forages widely.	Unlikely. Suitable nesting habitat is not present within the Study Area.	No further actions are recommended for this species.
Loggerhead shrike <i>Tyrannus caudifasciatus</i>	CDFW Species of Special Concern	Year-round resident in open woodland, grassland, savannah and scrub. Prefers areas with sparse shrubs, trees, posts, and other suitable perches for foraging. Preys upon large insects and small vertebrates. Nests are well-concealed in densely-foliaged shrubs or trees.	Moderate Potential. The Study Area provides suitable foraging and nesting habitat for this species.	If vegetation removal or ground disturbance occur during the nesting bird season (generally February 1 – September 15), then a preconstruction nesting bird survey shall be conducted per Mitigation Measure BIO-19.
Saltmarsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	CDFW Species of Special Concern	Resident of the San Francisco Bay region, in fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	Unlikely. The Study Area does not contain any tidal marshes, sloughs, or intertidal mud flats that can support this species.	No further actions are recommended for this species.
California black rail	California Threatened	Year-round resident in marshes (saline to freshwater) with dense	No Potential. The Study Area does not contain any tidal	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
<i>Laterallus jamaicensis coturniculus</i>	CDFW Fully Protected	vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an extensive upper zone and are close to a major water source. Extremely secretive and cryptic.	marshes, sloughs, or intertidal mud flats that can support this species.	
California Ridgway's rail <i>Rallus obsoletus obsoletus</i>	Federal Endangered California Endangered CDFW Fully Protected	Year-round resident in tidal marshes of the San Francisco Bay estuary. Requires tidal sloughs and intertidal mud flats for foraging, and dense marsh vegetation for nesting and cover. Typical habitat features abundant growth of cordgrass and pickleweed. Feeds primarily on mollusks and crustaceans.	No Potential. The Study Area does not contain any tidal marshes, sloughs, or intertidal mud flats that can support this species.	No further actions are recommended for this species.
Alameda song sparrow <i>Melospiza melodia pusillula</i>	CDFW Species of Special Concern	Year-round resident of salt marshes bordering the south arm of San Francisco Bay. Inhabits primarily pickleweed marshes; nests placed in marsh vegetation, typically shrubs such as gumplant.	No Potential. The Study Area does not contain any tidal marshes, sloughs, or intertidal mud flats that can support this species.	No further actions are recommended for this species.
Bank swallow <i>Riparia riparia</i>	California Threatened	Summer resident in riparian and other lowland habitats near rivers, lakes and the ocean in northern California. Nests colonially in excavated burrows on vertical cliffs and bank cuts (natural and manmade) with fine-textured soils. Historical nesting range in southern and central areas of California has been eliminated by habitat loss. Currently known to breed in Siskiyou, Shasta, and Lassen Cos., portions of the north coast, and along Sacramento River from Shasta Co. south to Yolo Co.	No Potential. The Study Area does not contain suitable nesting habitat including vertical cliffs or bank cuts.	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
California least tern <i>Sternula antillarum browni</i>	Federal Endangered California Endangered CDFW Fully Protected	Summer resident along the coast from San Francisco Bay south to northern Baja California; inland breeding also very rarely occurs. Nests colonially on barren or sparsely vegetated areas with sandy or gravelly substrates near water, including beaches, islands, and gravel bars. In San Francisco Bay, has also nested on salt pond margins.	No Potential. No suitable foraging or breeding habitat for this species is present within the Study Area.	No further actions are recommended for this species.
Western snowy plover <i>Charadrius nivosus nivosus</i>	Federal Threatened CDFW Species of Special Concern	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly, or friable soils.	No Potential. The Study Area does not contain any tidal sandy beaches, salt ponds, or alkali lakes that can support this species.	No further actions are recommended for this species.
Black skimmer <i>Rynchops niger</i>	CDFW Species of Special Concern	Found primarily in southern California; South San Francisco Bay has a small resident population. Nests colonially on gravel bars, low islets, and sandy beaches.	No Potential. The Study Area does not contain any nesting or foraging habitat that can support this species.	No further actions are recommended for this species.
Yellow warbler <i>Setophaga petechia</i>	CDFW Species of Special Concern	Summer resident throughout much of California. Breeds in riparian vegetation close to water, including streams and wet meadows. Microhabitat used for nesting variable, but dense willow growth is typical. Occurs widely on migration.	Moderate Potential. Riparian vegetation within the Study Area may provide nesting habitat for this species.	If vegetation removal or ground disturbance occur during the nesting bird season (generally February 1 – September 15), then a preconstruction nesting bird survey shall be conducted per Mitigation Measure BIO-19.
REPTILES & AMPHIBIANS				
Western pond turtle <i>Emys marmorata</i>	Federal Proposed Threatened,	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs,	High Potential. This species is known to occur in the vicinity of the Study Area and may be present in Stonybrook Creek	A survey for WPT shall be conducted 48 hours prior to the initiation of any ground disturbance, as described in Mitigation Measure BIO-16.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
	CDFW Species of Special Concern	vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	and its tributaries during periods of flow.	Additional avoidance is discussed in Mitigation Measures BIO-2, BIO-11 and BIO-12
California tiger salamander - central California DPS <i>Ambystoma californiense</i> pop. 1	Federal Threatened California Threatened	Populations in Santa Barbara and Sonoma counties currently listed as endangered; threatened in remainder of range. Inhabits grassland, oak woodland, ruderal and seasonal pool habitats. Adults are fossorial and utilize mammal burrows and other subterranean refugia. Breeding occurs primarily in vernal pools and other seasonal water features.	Unlikely. The Study Area contains limited underground refugia but does not provide suitable breeding habitat for this species. The nearest documented occurrence is 1.75 miles to the northeast in a pond along a tributary to Sinbad Creek (CDFW 2023b). However, this occurrence is separated from the Study Area by Highway 680 which presents a significant dispersal barrier. Recent sampling in nearby ponds to the south/southwest have not detected this species. CTS were detected at a pond approximately 4 miles from the Study Area in 2022 with no physical dispersal barriers in between; however, dispersal into the Study Area is unlikely due to the marginal habitat present and distance from this potential source population.	No further actions are recommended for this species.
Foothill yellow-legged frog <i>Rana boylei</i>	Federal Threatened California Endangered CDFW Species of Special Concern	Found in or adjacent to rocky streams in a variety of habitats. Prefers partly-shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds	Unlikely. This species is presumed to be extirpated from Alameda Creek and has not been documented to occur beyond the upper reaches of Alameda Creek.	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
California red-legged frog <i>Rana draytonii</i>	Federal Threatened CDFW Species of Special Concern	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.	Present. This species was observed in the iris-leaf rush seep within the Study Area during the site visit conducted on May 4, 2023. Additionally, this species has been documented breeding in several stock ponds within 1.5 miles of the Study Area (CNDDDB 2023a). Grassland within the Study Area and immediate vicinity provide suitable upland habitat and aquatic habitat within the Study Area may be utilized for dispersal.	Consultation with the USFWS will be required to address potential impacts to this species. See Mitigation Measures BIO-1 through BIO-12
Alameda whipsnake <i>Masticophis lateralis euryxanthus</i>	Federal Threatened California Threatened	Inhabits chaparral and foothill-hardwood habitats in the eastern Bay Area. Prefers south-facing slopes and ravines with rock outcroppings where shrubs form a vegetative mosaic with oak trees and grasses and small mammal burrows provide basking and refuge.	High Potential. The Study Area is proximate to known occurrences and core habitat elements are present within the Study Area and immediate vicinity. Rock outcrops are present on grassland slopes to the north and the Study Area itself provides a matrix of suitable habitat types. The Study Area is within designated critical habitat for this species.	Consultation with the USFWS and CDFW will be required to address potential impacts to this species. See Mitigation Measures BIO-2 through BIO-6, BIO-8, BIO-10, BIO-14, and BIO-15.
FISH				
Green sturgeon, southern Distinct Population Segment <i>Acipenser medirostris</i>	Federal Threatened CDFW Species of Special Concern	Spawn in the Sacramento River and the Feather River. Spawn at temperatures between 8-14 degrees C. Preferred spawning substrate is large cobble but can range from clean sand to bedrock.	No Potential. The Study Area is outside the spawning range for this species.	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Steelhead - central California coast DPS <i>Oncorhynchus mykiss irideus pop. 8</i>	Federal Threatened	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	Moderate. The Study Area includes a small portion of Stonybrook Creek, which has potential support this species. Plans to remove fish passage barriers at the mouth of Stonybrook Creek may allow passage of steelhead into the Stonybrook Creek watershed (ACA 2022); however, intermittent tributaries to Stonybrook Creek are unlikely to provide spawning or rearing habitat.	Project activities within Stonybrook Creek shall be conducted during the dry season. In addition, Mitigation Measures BIO-11 and BIO-12 shall be implemented. Section 7 consultation with USFWS may be required.
Longfin smelt <i>Spirinchus thaleichthys</i>	Federal Candidate California Threatened	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.	No Potential. The Study Area does not contain aquatic habitat that can support this species.	No further actions are recommended for this species.
INVERTEBRATES				
Crotch bumble bee <i>Bombus crotchii</i>	California Candidate Endangered	Range largely restricted to California, favoring grassland and scrub habitats. Typical of bumble bees, nests are usually constructed underground.	Moderate Potential. The Study Area occurs within this species' known current distribution. Grassland within the Study Area may provide foraging resources and potential nest sites.	A survey shall be conducted within 14 days prior to the commencement of Project activities (see Mitigation Measure BIO-18)
Western bumble bee <i>Bombus occidentalis</i>	California Candidate Endangered	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2015). Occurs in a wide variety of habitat types. Nests are constructed	Unlikely. The Study Area is outside of this species known current distribution. There are no recent documented occurrences of this species in the vicinity of the Study Area.	No further actions are recommended for this species.



SCIENTIFIC NAME	STATUS ^{1, 2}	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
		annually in pre-existing cavities, usually on the ground (e.g. mammal burrows). Many plant species are visited and pollinated.		
Monarch - California overwintering population <i>Danaus plexippus pop. 1</i>	Federal Candidate Winter roosts protected by CDFW	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	Unlikely. The Study Area is greater than 4 miles from the San Francisco Bay, and beyond typical winter roost locations. This species may be observed seeking nectar within the Study Area.	No further actions are recommended for this species.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Federal Threatened	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	No Potential. No vernal pool or swale habitats are present within the Study Area.	No further actions are recommended for this species.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	Federal Endangered	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	No Potential. No vernal pool or swale habitat is present within the Study Area. Furthermore, no other occurrence of this species has been documented within Alameda County (CDFW 2023b).	No further actions are recommended for this species.



Note: All species identified using the *Jepson eFlora* [Jepson Flora Project (eds.) 2023]; nomenclature follows *Jepson eFlora* [Jepson Flora Project (eds.) 2023] or Inventory of Rare and Endangered Plants (CNPS 2023).

¹ **California Native Plant Society. 2023. Rare Plant Inventory (online edition, v9-01 1.5). Sacramento, California. Online at: <http://rareplants.cnps.org/>; most recently accessed: August 2023.**

FE:	Federal Endangered
FT:	Federal Threatened
SE:	State Endangered
ST:	State Threatened
SR:	State Rare
Rank 1A:	Plants presumed extinct in California
Rank 1B:	Plants rare, threatened, or endangered in California and elsewhere
Rank 2:	Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 3:	Plants about which we need more information – a review list
Rank 4:	Plants of limited distribution – a watch list

² **California Invasive Plant Council. 2023. California Invasive Plant Inventory Database. California Invasive Plant Council, Berkeley, CA. Online at: <http://www.cal-ipc.org/paf/>; most recently accessed: May 2023.**

High:	Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically.
Moderate:	Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limited-moderate distribution ecologically
Limited:	Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically
Assessed:	Assessed by Cal-IPC and determined to not be an existing current threat

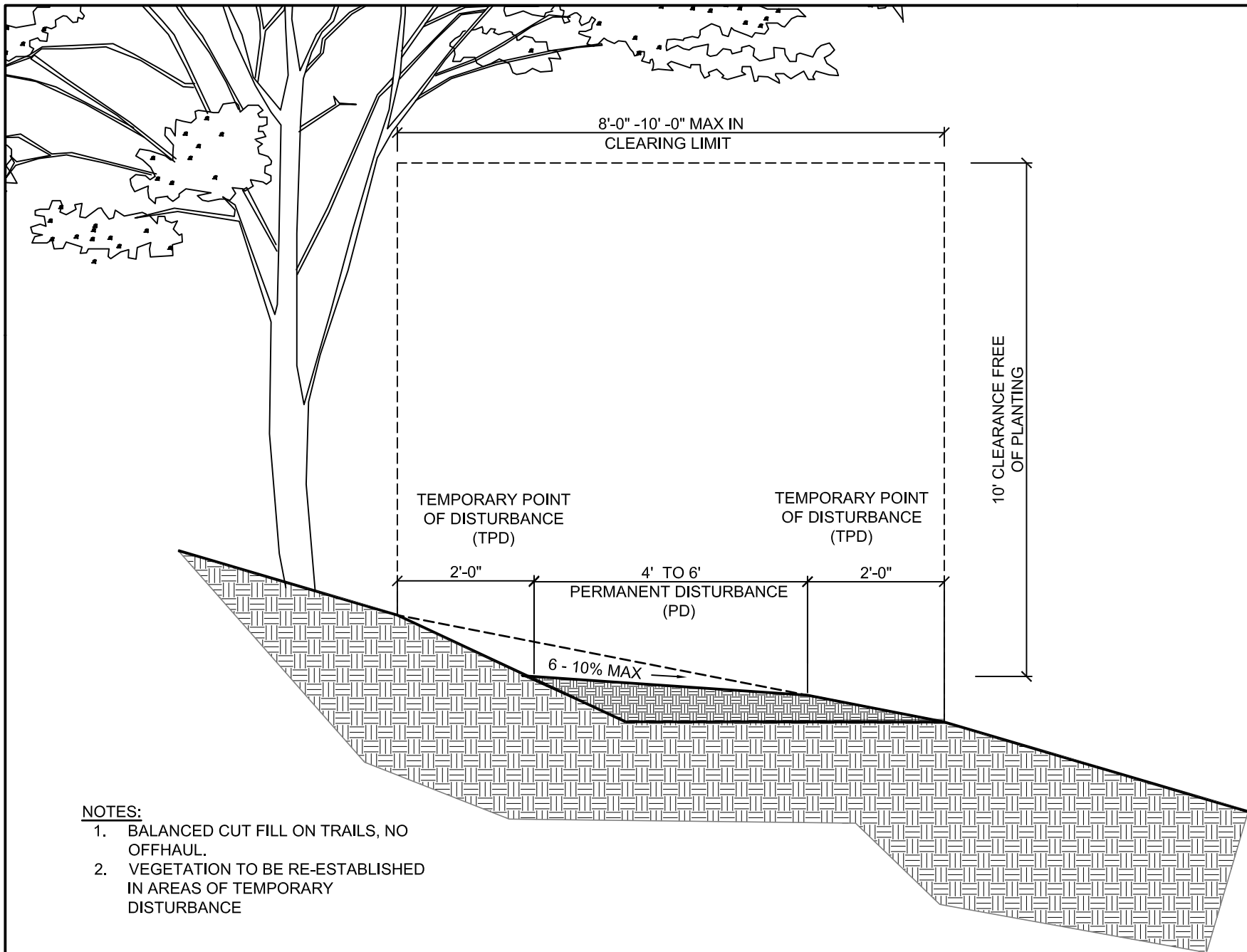


APPENDIX D. PROPOSED TRAIL SCHEMATIC DRAWING



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MULTI USE, NATURAL SURFACE TRAIL

EAST BAY REGIONAL PARK DISTRICT -TRAIL STANDARDS

NTS

