DRAFT
Initial Study and Mitigated Negative Declaration for the Calaveras Ridge Regional Trail Project

Lead Agency:

East Bay Regional Park District

2950 Peralta Oaks Court

Oakland, CA 94605

January 2025

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

DRAFT

Initial Study and Mitigated Negative Declaration

Calaveras Ridge Regional Trail Project

Lead Agency:

East Bay Regional Park District
2950 Peralta Oaks Court
Oakland CA, 94605

Prepared by:

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January 2025

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DRAFT MITIGATED NEGATIVE DECLARATION
CALAVERAS RIDGE REGIONAL TRAIL

Lead Agency:	East Bay Regional Park District
Project Proponent:	East Bay Regional Park District
Project Location:	Various parcels primarily within the City of Lafayette, CA 94549

AVAILABILITY OF DOCUMENTS: The Initial Study for this Mitigated Negative Declaration is available for review online at the East Bay Regional Parks District Website at the following link: **:**
https://www.ebparks.org/projects/regional-trails

Brief Project Summary:

East Bay Regional Park District (EBRPD) is proposing a new 2.5-mile regional trail segment of the Proposed Calaveras Ridge Regional Trail in Contra Costa County (Project). The Project proposed to construct 1.2- miles of new trail and will utilize 1.3-miles of an existing dirt roadway. Much of the Project is within an easement owned by EBRPD over private land. This trail segment would connect to the existing Lafayette/Moraga Regional Trail, then continue south to Rohrer Drive and the Rohrer Trail and eventually Las Trampas Regional Preserve. The Calaveras Ridge Regional Trail is one of the originally designated regional trail corridors in the EBRPD Master Plan. Once constructed, this multi-use trail corridor parallels the Interstate 680 corridor connecting six regional parks.

Public Review Period:

A copy of the Initial Study is attached. Questions or comments regarding this Draft Initial Study/Negative Declaration should be submitted in writing to:

Rourke Healey
2950 Peralta Oaks Court
Oakland, CA 94605
E-mail Address: rhealey@ebparks.org

The public review and comment period for the Draft IS/MND will extend for 30 days starting **January 14, 2025 to February 13, 2025.**

Pursuant to Section 21082.1 of the California Environmental Quality Act, the EBRPD has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the Proposed Project and finds that these documents reflect the independent judgment of EBRPD. EBRPD, as lead agency, also confirms that the Project requirements detailed in these documents are feasible and will be implemented as stated in the Mitigated Negative Declaration.

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1 **Disturbance Buffer.** If any special-status wildlife individuals (e.g., Alameda striped racer and CRLF) or nursery sites are observed during Project activities, all work will stop within a no-disturbance buffer of 100 feet around the individual or site unless the qualified biologist determines that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Project-related activities shall cease within the buffer until the animal leaves on its own or the nursery site is no longer active and the occurrence will be reported to the qualified biologist. The appropriate resource agencies (e.g., the USFWS and the CDFW) shall be contacted, if required.

BIO-2 **Special-Status Plant Surveys.** If special-status plant surveys for the Project are not current per the CDFW protocol (CDFW 2018; surveys are typically considered current if it is within 2-5 years of construction), a preconstruction special-status plant survey shall be conducted according to the CDFW, CNPS, and USFWS protocols.

Surveys shall be conducted throughout all suitable habitat within the Project Area (including all areas with Proposed Project ground-disturbing or vegetation-disturbing activities) and a 25-foot buffer to address potential direct and indirect impacts of the Project. Surveys shall be conducted by a qualified biologist and timed according to the identifiable period for special-status plant species with potential to occur (typically the blooming period). To the extent feasible, known reference populations will be visited prior to surveys to confirm target species are evident and identifiable at the time of the survey. If no special-status plants are found, no further measures pertaining to special-status plants are necessary.

If found and complete avoidance is not feasible, an impact assessment shall be conducted by a qualified biologist to determine whether Project-related activities would be significant such that they would have the potential to eliminate, substantially reduce the number of, or restrict the range of the special-status plant species, and/or conflict with any local policies or ordinances protecting special-status plant species. If impacts are determined to be less than significant, no further measures are needed. Consultation with the appropriate agency (the CDFW, the USFWS and/or the CEQA Lead Agency) would occur for significant impacts to determine if additional avoidance and minimization measures are necessary.

BIO-3 **Candidate Bumble Bee Preconstruction Survey and Avoidance.** If the Crotch's bumble bee is still a candidate or formally listed species under the California ESA at the time construction occurs and if ground-disturbing activities are scheduled to begin between February 1 and October 31, candidate bumble bee preconstruction surveys shall be conducted by a qualified biologist. Based on CDFW's Survey Considerations for California ESA Candidate Bumble Bee Species, it is recommended that three candidate bumble bee surveys be conducted at two-to-four-week intervals during the colony active period (April-August), if possible. If a candidate bumble bee is detected, any remaining surveys will focus

on nest detection. If an active candidate bumble bee nest is detected, an appropriate no disturbance buffer zone shall be established around the nest in coordination with CDFW. Nest avoidance buffers may be removed at the completion of the flight season (October 31) and/or once the qualified biologist deems the nesting colony is no longer active.

BIO-4 **Nesting Bird Avoidance or Preconstruction Survey.** To the extent feasible, Project activities shall be conducted outside of the bird nesting season (typically February 1–August 31, and as early as January 1 for raptors). If Project activities cannot happen outside of bird nesting season a preconstruction nesting bird survey shall be conducted by a qualified biologist within 14 days prior to the commencement of Project-related activities to identify active nests that could be impacted by construction. The preconstruction nesting bird survey shall include accessible areas within 100 feet of the Project boundaries, including any temporary disturbance areas. For raptors, the preconstruction nesting bird survey shall include accessible areas within 500 feet of the Project boundary. If active nests are found, a no-disturbance buffer shall be established around the nest. A qualified biologist, in consultation with the CDFW, shall establish a buffer distance. The buffer shall be maintained until the nestlings have fledged (e.g., are capable of flight and become independent of the nest), to be determined by a qualified biologist. The avoidance buffer can be removed and no further measures are necessary once the young have fledged or the nest is no longer occupied, as determined by a qualified biologist.

BIO-5 **Bat Avoidance.** Avoid tree removal or trimming of tree branches except for small branches and limbs containing no cavity, crevice or exfoliating bark within the Project Area. If construction activities using loud construction equipment (e.g., rotor hammer, compactor/roller, excavator) are avoided during the maternity season for special-status bats (April 1 through August 31), no mitigation is required. If construction activities using loud construction equipment (e.g., rotor hammer, compactor/roller, excavator) are scheduled to occur during the maternity season for special-status bats (April 1 through August 31), no more than 14 days prior to use of this equipment, a qualified biologist will conduct preconstruction surveys for special-status bat roosts within 250 feet of the Project Area. If any occupied special-status bat roosts are located during preconstruction surveys, no work using loud construction equipment will be performed within a 250-foot buffer around the roosts during the period when the maternity roost is potentially active (April 1 through August 31).

BIO-6 **Regulatory Permits.** If needed, the Park District shall obtain permits to impact jurisdictional features from the USACE, RWQCB, and/or CDFW. These permits will include conditions and Best Management Practices that the District shall implement during construction. Through implementation of the measures, impacts to jurisdictional features will be less than significant. These permits may also specify mitigation, which the District shall provide as specified by the agencies.

BIO-7 **Tree Permit and Avoidance.** If needed, a Tree Removal Permit shall be secured prior to impacting trees protected under the Lafayette ordinance, and all Lafayette requirements for

impacting protected trees shall be met, including tree replacement or in-lieu payment. Avoidance buffers for avoided protected trees shall be consistent with the Lafayette requirements, shall be clearly demarcated as needed prior to construction, and shall be maintained until the completion of construction. A qualified biologist shall be present if work must occur within the avoidance buffer to ensure avoided protected trees are not impacted by the work.

Cultural Resources

CUL-1 **Unanticipated Discoveries.** There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Therefore, the following procedures shall be implemented:

- If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:
- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.
- If the find represents a Native American or potentially Native American resource that does not include human remains, then he or she shall further notify [tribe]. The agencies shall consult with the tribes on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Preservation in place is the preferred treatment, if feasible. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section

15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the Contra Costa County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

Paleontological Resources

PALEO-1 **Discovery of Unknown Resources.** If any paleontological resources (i.e., fossils) are found during Project construction, construction shall be halted immediately in the subject area and the area shall be isolated using orange or yellow fencing until EBRPD is notified and the area is cleared for future work. A qualified paleontologist shall be retained to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resources. If EBRPD resumes work in a location where paleontological remains have been discovered and cleared, EBRPD will have a paleontologist onsite to confirm that no additional paleontological resources are in the area.

Transportation

TRANS-1 **Prepare and Implement a Construction Traffic Management Plan.** If any lane closures are required as part of Project implementation, EBRPD shall require the contractor to prepare a Construction Traffic Management Plan in accordance with City of Lafayette requirements and professional engineering standards prior to construction. The Traffic Management Plan shall specifically address the proposed sidewalk connections to Olympic Boulevard and the following: adequate provisions for protection of the traveling public; emergency service access; the need for temporary traffic controls (signage/flaggers); and maintenance of private property driveway access. All traffic controls, including equipment and personnel

requirements, shall be consistent with the current State of California Manual of Traffic Controls for Construction and Maintenance Work Areas.

Tribal Cultural Resources

TCR-1 **Tribal Cultural Resources Awareness Training.** A tribal cultural resources awareness training shall occur prior to Project construction, and on an as-needed basis (e.g., when new construction personnel arrive on-site).

TCR-2 **Tribal Monitoring.** A tribal monitor shall be present during trail construction within the EBRPD owned parcel, and specifically during construction of the creek crossing/bridge. The EBRPD shall develop a monitoring plan and a tribal monitor shall conduct monitoring intermittently throughout the Project Area, during ground-disturbing activities. The tribal monitor should be from an East Bay Ohlone tribe, associated with the Saclan Village (e.g., The Ohlone Indian Tribe, the Confederated Villages of Lisjan Nation, or the Muwekma Ohlone Tribe of the SF Bay Area). The Confederated Villages of Lisjan Nation and the Ohlone Indian Tribe requested to be contacted if any cultural resources were identified during Project-related construction.

TCR-3 **Project Related Planting.** The Confederated Villages of Lisjan Nation shall be consulted to provide input for the Project-related planting palette, prior to the finalization of the palette plan.

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Appendix C – ***CONFIDENTIAL REPORT*** *Cultural Resources Assessment for the Calaveras Ridge Trail Burton Ridge Vicinity Project, Lafayette, Contra Costa County, California*, Rincon Consultants, Inc. October 3, 2024

Appendix D – Calaveras Ridge Regional Trail Project Energy Consumption Memorandum ECORP Consulting, Inc. August 2024

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ACRONYMS AND ABBREVIATIONS

Term	Definition
AB	Assembly Bill
ANSI	American National Standards Institute
APN	Assessor's Parcel Number
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BMPs	Best Management Practices
BRA	Biological Resource Assessment
BSA	Biological Study Area
CAISO	California Independent Service Operator
Cal EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCCWP	Contra Costa County Clean Water Program (

Term	Definition
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEHC	California Essential Habitat Connectivity
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalence Levels
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRLF	California red-legged frog
CRPR	California Rare Plant Rank
CUPA	Certified Unified Program Agencies
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DOC	California Department of Conservation
DTSC	California Department of Toxic Substances Control
EBMUD	East Bay Municipal Utilities District
EBRPD	East Bay Regional Park District
ECORP	ECORP Consulting, Inc.
EIR	Environmental Impact Report
EMFAC	Emission Factor model
EO	Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gas
IS	Initial Study
IS/MND	Initial Study/Mitigated Negative Declaration
LDR	Low-Density Residential
MFM	Medium Multi-Family
MGD	million gallons per day
MLD	Most Likely Descendant

Term	Definition
MLRA	Major Land Resource Area
MND	Mitigated Negative Declaration
MOA	Memorandum of Agreement
mph	miles per hour
MRP	Municipal Regional Stormwater Permit
MRZ	Mineral Resource Zone
MSL	Mean Sea Level
N2O	nitrous oxide
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NO_x	nitric oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWIC	Northwest Information Center
O3	Ozone
OHWM	Ordinary High Water Mark
PG&E	Pacific Gas and Electric Company
PM	Post Mile
ppm	parts per million
PPV	Peak particle velocity
PRC	Public Resources Code
ROG	Reactive Organic Gases
RPA	Registered Professional Archaeologist
RPS	Renewable Portfolio Standards
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SFBAAB	San Francisco Bay Area Air Basin (
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO2	sulfur dioxide
SRA	State Responsibility Area
TCR	Tribal cultural resource
THPO	Tribal Historic Preservation Officer
TNW	Traditional Navigable Water
UCMP	University of California Museum of Paleontology
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	Vehicle Miles Traveled

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1.0 BACKGROUND

1.1 Summary

Project Title:	Calaveras Ridge Trail Project: Briones to Las Trampas Regional Trail – Burton Ridge Vicinity
Lead Agency Name and Address:	East Bay Regional Parks District
Contact Person and Phone Number:	Rourke Healey (888) 327-2757
Project Location:	Various parcels primarily within the City of Lafayette, CA 94549. The new trail would start on parcel number 189-051-053, span numerous parcels and end at 238-090-030.
General Plan Designation:	Open Space and Rural Residential
Zoning:	LR-10/Low-Density Residential District 10

1.2 Introduction and Regulatory Guidance

The East Bay Regional Parks District (EBRPD) is the Lead Agency for the Proposed Calaveras Ridge Regional Trail Project (Project) in Contra Costa, California. This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by ECORP Consulting, Inc. to identify and assess the potential environmental impacts of the Proposed Project and has been arranged to satisfy requirements of the California Environmental Quality Act (CEQA) (Public Resource Code [PRC], Section 21000 et seq.) and State CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. A CEQA IS is typically prepared to determine which CEQA document is appropriate for a project (i.e., typically an IS leads to either a Negative Declaration, MND, or Environmental Impact Report [EIR]). If the Lead Agency determines that project plans or proposals made by or agreed to by East Bay Regional Park District (EBRPD) mitigate the potentially significant impacts to a less-than-significant level, a MND may be prepared instead of an EIR (CEQA Guidelines 15070(b)). This IS/MND is a written statement describing the reasons the Proposed Project would not have a significant effect on the environment with mitigation incorporated, and therefore, why an EIR need not be prepared. This IS/MND also conforms to the content requirements under CEQA Guidelines 15071.

1.3 Lead Agency

The Lead Agency is the public agency with primary approval authority over the Proposed Project. In accordance with CEQA Guidelines 15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with limited purpose." The Lead Agency for the Proposed Project is EBRPD. The contact person for the Lead Agency is:

Rourke Healey
East Bay Regional Parks District
2950 Peralta Oaks Court
Oakland, CA 94605
E-mail Address: rhealey@ebparks.org

The public review and comment period for the Draft IS/MND will extend for 30 days starting **January 14, 2025 to February 13, 2025.**

1.4 Document Purpose and Organization

The purpose of this document is to evaluate the potential environmental effects of the proposed Calaveras Ridge Regional Trail Project. Mitigation Measures and Best Management Practices (BMPs) have also been incorporated into the Project to eliminate any potentially significant impacts to reduce them to a less than significant level.

This document is organized as follows:

Section 1 – Background: This chapter introduces the Project and describes the purpose and organization of this document.

Section 2 – Project Description: This chapter describes the reasons for the Project, scope of the Project, objectives of the Project, and the Project requirements.

Section 3 – Environmental Factors Potentially Affected and Determination: This chapter identifies the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impacts to humans, as identified in the IS.

Section 4 – Environmental Checklist and Discussion: This chapter identifies the significance of potential environmental impacts, describes the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental Checklist for Initial Studies. Mitigation measures are incorporated, where appropriate, to reduce potentially significant impacts to a less than significant level.

Section 5 – List of Preparers: This chapter provides a list of those involved in the preparation of this document.

Section 6 – References: This chapter identifies the references and sources used in the preparation of this IS/MND.

Section 7 – List of Appendices: This chapter identifies appendices used in the preparation of this IS/MND.

1.5 Summary of Findings

Section 4 of this document contains the IS Environmental Checklist, which identifies the potential environmental impacts and a brief discussion of each impact resulting from the implementation of the Proposed Project. Based on the IS and supporting environmental analysis provided in this document, the

proposed Calaveras Ridge Regional Trail Project would result in less than significant impacts for the following issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, tribal cultural resources, utilities and service systems, wildfires, and mandatory finding of significance.

In accordance with §15064(f) of the CEQA Guidelines, an MND shall be prepared if the Proposed Project will not have a significant effect on the environment. Based on the available Project information and the environmental analysis presented in this document, there is no substantial evidence that the Proposed Project would have a significant effect on the environment.

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2.0 PROJECT DESCRIPTION

2.1 Project Location and Background

East Bay Regional Park District (EBRPD) is proposing a new 2.5-mile-long regional trail segment of the Calaveras Ridge Regional Trail consisting of 1.2 miles of new trail and 1.3 miles of an existing dirt roadway. This trail segment would connect to the existing Lafayette/Moraga Regional Trail, then continue southward to Rohrer Drive and the Rohrer Trail and eventually Las Trampas Regional Preserve. The Calaveras Ridge Regional Trail is one of the originally designated regional trail corridors in the Park District Master Plan. This multi-use trail corridor generally parallels the Interstate 680 corridor connecting six regional parks.

This trail segment would predominantly be within the City of Lafayette jurisdictional boundaries but bisects the City of Walnut Creek in the middle of the trail, all within Contra Costa County.

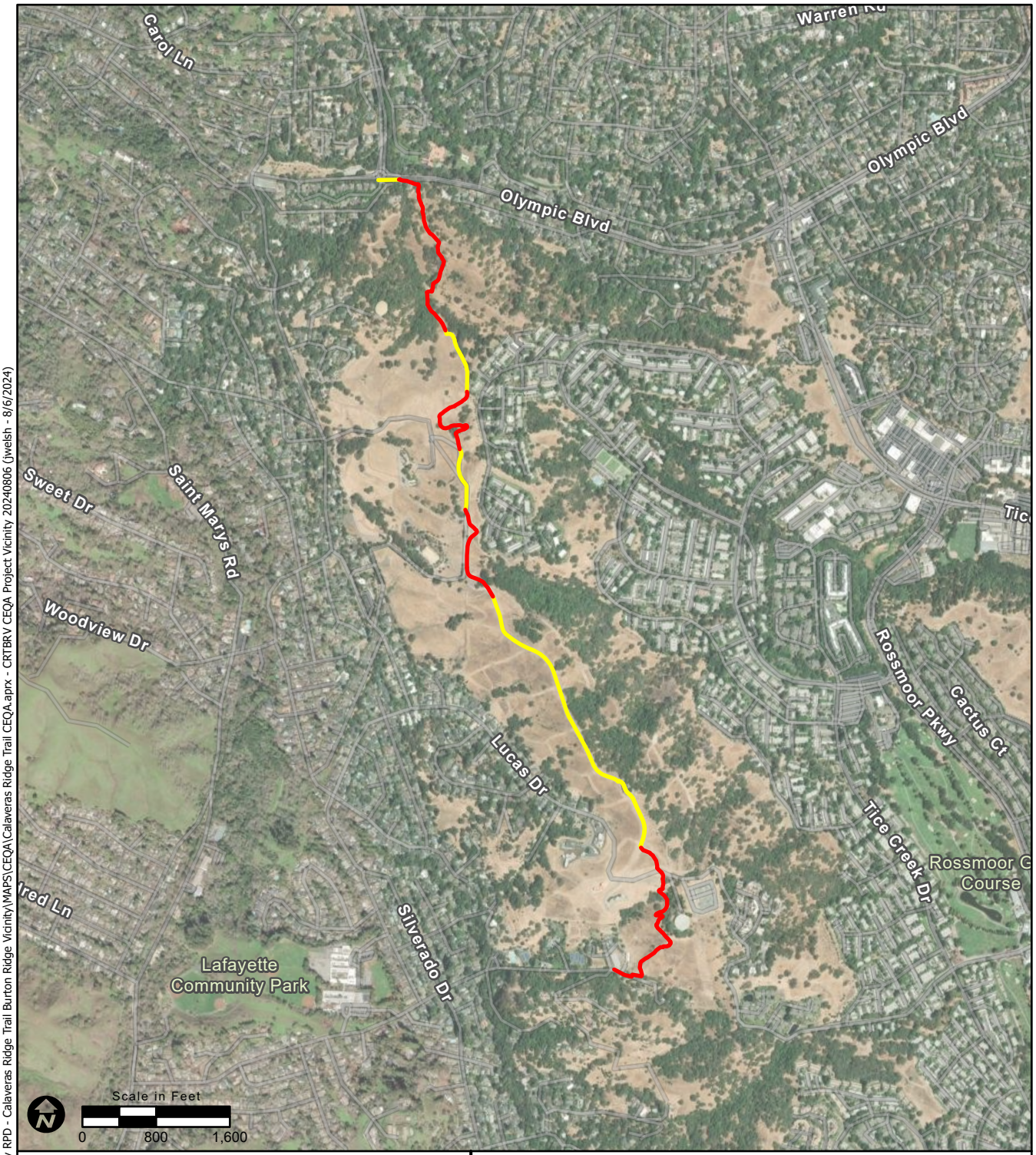
The new trail extends across 13 different parcels. Table 2-1 provides the Assessor's Parcel Number (APN) and the property owners for each of the parcels:

Table 2-1. APNs and Property Owners

APN	Private/Public Property Owner
189-051-053	EBRPD Owned
238-080-036	Private Property Owner
238-080-033	Private Property Owner
028-080-032	Private Property Owner
186-070-011	Private Property Owner
238-080-035	Private Property Owner
238-080-019	Private Property Owner
238-210-009	Private Property Owner
238-210-008	Private Property Owner
238-210-005	Private Property Owner
238-210-007	Private Property Owner
238-090-027	Private Property Owner
238-090-030	Private Property Owner

Note: APN = Assessor's Parcel Number: EBRPD = East Bay Regional Park District

The northernmost end of the trail is owned by EBRPD and the remaining parcels are owned by private landowners. EBRPD has acquired easements from the private property owners to develop the trail. The regional location of the trail is shown on Figure 2-1.



Location: N:\2023\2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity\MAPS\CEQA\Calaveras Ridge Trail CEQA.aprx - CRTBRV CEQA Project Vicinity 20240806 (jwelsh - 8/6/2024)

Map Date: 8/6/2024
Sources: ESRI, Maxar (2022)

Figure 2-1. Project Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity

2.2 Existing Conditions

The Project Area is primarily undeveloped, with sections located on private property used for equestrian activities and pastureland. A dirt road runs intermittently through the central portion of the Project Area, which will be utilized as a connection for the new trail segments. There are portions of the new trail that have been covered with mulch from the private landowners. Additionally, the site also has numerous unofficial trails that have been created by visitor use. Currently, the site contains no controls or limitations as to where visitors can walk/hike. The surrounding land uses are residential single-family homes to the north, west and south, and a senior living residence to the east.

The majority of the Project Area is composed of grassland; however, oak trees occur throughout the northern and central proposed trail alignment. There is an existing intermittent drainage that the proposed trail will cross using a clear span bridge. A series of representative photos of the existing conditions on the Project Area are provided on Figure 2-2.

2.3 Project Purpose, Need and Objectives

The mission of EBRPD is to preserve a rich heritage of natural and cultural resources and provide open spaces, parks, trails, safe and healthful recreation and environmental education. Additionally, the District envisions an extraordinary and well-managed system of open space parkland in Alameda and Contra Costa counties, which provide the opportunity for a growing and diverse community to experience nature nearby. EBRPD conceptualized this Project to support these aspects of its mission, by creating opportunities for high quality recreation, minimizing environmental impact by preserving natural habitats, reduce the proliferation of unsustainable unofficial trails, and increasing existing trail connectivity.

Since the 1970s, the Calaveras Ridge Regional Trail is one of the originally designated regional trail corridors in the Park District Master Plan. This multi-use trail corridor travels along the Interstate 680 corridor connecting six regional parks. It serves communities from the Sunol Regional Wilderness, through Pleasanton Ridge to Dublin Hills into Contra Costa County where it continues through Las Trampas Regional Wilderness to the City of Lafayette through Briones Regional Park, with connections to the Carquinez Strait. In total, the Calaveras Ridge Trail will be a 20.5-mile unpaved regional trail. Approximately 54% of this trail is complete as of 2023.

This proposed segment will be within the Burton Ridge Vicinity that will provide connectivity to the Briones Reserve by the Lafayette/Moraga Regional Trail and eventually to Las Trampas Regional Preserve. This trail segment is vital to connect Briones Regional Park to the Las Trampas Regional Trail.

Photo 1. Representative photo of proposed trail alignment within the northern most trail segment. Photo taken April 26, 2024.

Photo 2. Representative photo of the stream area, facing north. Photo taken April 26, 2024.

Photo 3. Beginning of the middle trail segment, facing northeast. Photo taken April 26, 2024.

Photo 4. Trail will run parallel on the left side of road, facing south. This is a portion of southern segment. Photo taken April 26, 2024.

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 2-2. Representative Site Photographs

2023-136.01/East Bay RPD - Calaveras Ridge Trail
Burton Ridge Vicinity

2.4 Project Description

As mentioned above, EBRPD is proposing a new 2.5-mile regional trail segment to the Calaveras Ridge Regional Trail consisting of 1.2- miles of new trail and 1.3-miles of an existing dirt roadway within the Burton Ridge Vicinity. The northern part of the trail will ultimately connect with the Lafayette/Moraga Regional Trail to the north of the Project Area. Access improvements would be made along the sidewalk of Olympic Boulevard to the entrance of the new Calaveras Ridge Trail segment to facilitate the connection. The southern portion of the trail would connect to the Rohrer Trail on Rohrer Drive, which provides access to the Las Trampas Regional Trail. Bollards would be constructed at both the north and south end of the trail to prevent motor vehicles from driving on to the trail.

The new trail segment would follow the confines of the physical geography and utilize topography to minimize impacts to known habitats. Minimal tree trimming may be required, but no tree removal is proposed for implementation of the Project. There is an ephemeral drainage that crosses the proposed trail alignment, and a new clear span bridge is proposed to avoid wetland features. Figures 2-3a through 2-3d provides a detailed aerial showing the proposed trail alignment and other proposed improvements.

For the clear span bridge construction, concrete footings, either pre-cast or poured in place, will be placed above the top of banks. The bridge span will be assembled on site using steel beams for stringers with lumber for decking and handrails. Aggregate will be imported as needed to provide approach ramps to the structure.

Fencing is proposed along sections of the trail. The fencing would total 0.7 miles. The fence would be equestrian fencing, with wood posts with wood or metal slats to deter trail users from wandering off the path. Fencing locations are shown on Figure 2-3a through 2-3d and an example of the fencing design is shown on Figure 2-4. There are 10 access gates proposed throughout the trail.

EBRPD utilizes the California Department of Parks and Recreation's Trail Manual for trail design and construction solutions and standards. The Department of Parks and Recreation's Trails Manual emphasizes sustainable design concepts and these have been incorporated into the Project to ensure non-disruptive and compatible relationships between new trail construction and land-based resources. Early and late season botanical surveys and a wetland delineation have been performed to identify any sensitive resources and habitat, which have been taken into consideration in determining the proposed trail alignment.

As mentioned above, EBRPD owns parcel 189-051-053, but the trail would cross numerous private properties. EBRPD has worked with the property owners of the other parcels to establish an easement that would allow for trail construction and operation.

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East Bay Regional Park District
Healthy Parks Healthy People

CALAVERAS RIDGE REGIONAL TRAIL

Briones to Las Trampas Regional Trail - Burton Ridge Vicinity

N

0 110 220 Feet

Proposed Regional Trail (New Trail, 1.2 miles)
Proposed Regional Trail (Existing Roadway, 1.3 miles)
Proposed Fencing (0.7 miles)
Existing Regional Trail
Proposed Gate
Proposed Bridge
Staging Area (5,870 sqare feet)
County Parcel
EBRPD Property

189-051-053
EBRPD

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Page 2
Page 3
Page 4

Date: 7/22/2024

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Figure 2-3a. Trail Alignment

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East Bay Regional Park District
Healthy Parks Healthy People

CALAVERAS RIDGE REGIONAL TRAIL

Briones to Las Trampas Regional Trail - Burton Ridge Vicinity

N

0 110 220 Feet

Proposed Regional Trail (New Trail, 1.2 miles)
Proposed Regional Trail (Existing Roadway, 1.3 miles)
Proposed Fencing (0.7 miles)
Proposed Gate
Staging Area (5,870 sqare feet)
County Parcel
EBRPD Property

238-080-036
Lindberg

238-080-033
Liviakis

186-070-011
GRF

238-080-035
Lindberg

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Figure 2-3b. Trail Alignment

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East Bay Regional Park District
Healthy Parks Healthy People

CALAVERAS RIDGE REGIONAL TRAIL

Briones to Las Trampas Regional Trail - Burton Ridge Vicinity

N

0 110 220 Feet

238-080-035
Lindberg

238-080-019
Soldier Field Partners LLC

Proposed Regional Trail (New Trail, 1.2 miles)
Proposed Regional Trail (Existing Roadway, 1.3 miles)
Proposed Fencing (0.7 miles)
Proposed Gate
Staging Area (5,870 sqare feet)
County Parcel

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Page 3
Page 4

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Figure 2-3c. Trail Alignment

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East Bay Regional Park District
Healthy Parks Healthy People

CALAVERAS RIDGE REGIONAL TRAIL

Briones to Las Trampas Regional Trail -
Burton Ridge Vicinity

N

0 110 220 Feet

238-210-009
Soldier Field Partners LLC

238-210-008
Zhang

238-210-005
Ohare

238-210-007
Soldier Field
Partners LLC

238-090-027
Goldwyn

238-090-030
Eubanks

- Proposed Regional Trail (New Trail, 1.2 miles)
- Proposed Regional Trail (Existing Roadway, 1.3 miles)
- Proposed Fencing (0.7 miles)
- Staging Area (5,870 sqare feet)
- County Parcel

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Page 3
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Figure 2-3d. Trail Alignment

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This is an example of the proposed fencing that borders along sections of the trail. The fence would be equestrian fencing, with wood posts with wood or metal slats to deter trail users from wandering off of the path.

2.5 Construction Approach

The Project will be completed by EBRPD trail crews and will utilize a combination of hand tools and mechanized equipment such as a SWECO trail dozer, mini excavator, and tracked mud buggies for trail construction. Construction equipment will access the Project Area via existing roadways near the south entrance at the Soldier Fields parcel (see Figure 2-3d) and remain within the proposed trail alignment. Stockpiling of materials will be within a 5,870-square-foot staging area adjacent to the northern portion of the trail and the proposed bridge crossing on EBRPD owned property. See Figure 2-3a for the location of the staging area.

Excavation and grading would be conducted to establish a trail bench. The trail alignment would be 4 feet in width. The 1.2-miles of new trail at 4 feet of width would result in approximately 25,344-square-feet of graded area. Most grading/excavation would not exceed one to three feet Below Ground Surface, but the maximum depth of disturbance would be 4 feet.

2.6 Construction Timing

Construction is anticipated to occur between May and October 2026. Construction would take approximately eight weeks.

2.7 Construction Best Management Practices

EBRPD will implement construction BMPs to avoid and minimize impacts on sensitive biological, cultural, and water resources .

The following BMPs would be included in the Project specifications and implemented by the contractor as part of the Project.

BMP-1: **Temporary Fencing.** The EBRPD shall install construction barrier fencing (including sediment fencing and straw wattles) to prevent contaminants and debris from entering waterways. Before construction begins, EBRPD shall identify the locations for the barrier fencing and mark those locations with stakes or flagging.

BMP-2: **Equipment Contaminants.** EBRPD shall comply with applicable stormwater ordinances, stormwater management plans, and BMPs to prevent or minimize the potential release of equipment-related petroleum contaminants into surface waters and groundwater. Implementation of standard construction procedures and precautions for working with petroleum and construction chemicals would further ensure that the impacts related to chemical handling during Project construction would be minor.

Applicable ordinances would be the City of Lafayette Chapter 5-4 of the Municipal Code, which requires that all development projects within the City of Lafayette are prohibited to discharge non-stormwater discharge into the City's stormwater system, follow the Contra Costa Clean Water Program Stormwater C.3. Guidebook, and follow the BMP's listed in Section 5-409 of the Lafayette Municipal Code.

BMP-3: **Erosion Control.** Erosion control materials that use plastic or synthetic monofilament netting will not be used in order to prevent species from becoming entangled, trapped or injured. This includes products that use photodegradable or biodegradable synthetic netting, which can take a full calendar year or more to decompose. Acceptable materials include natural fibers such as jute, coconut, twine or other similar fibers.

BMP-4: **Minimization of Work Area.** Project activities will be restricted to the minimum area necessary. Prior to start of work, Project boundaries and access routes will be clearly demarcated to prevent work vehicles from straying into adjacent habitat. To the extent feasible, maintenance and construction activities will avoid small mammal and ground squirrel burrows and potential dens that may be used by species for shelter.

BMP-5: **Daytime Work Hours.** All construction activities must cease one half hour before sunset and shall not begin prior to one half hour after sunrise. Nighttime construction is allowed only if authorized by CDFW and U.S. Fish and Wildlife Service (USFWS), and City of Lafayette.

BMP-6: **Fire Prevention.** All Project activities will follow the EBRPD's 01 51 16 Temporary Fire Protection Specifications. This has been included as Appendix F of this document.

BMP-7: **Hazardous Materials Storage/Disposal.**

- Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into State waters or its tributaries will be contained in watertight containers or removed from the Project Area.
- Use biodegradable chainsaw bar oil.
- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- Store hazardous materials and wastes in watertight containers, store in appropriate secondary containment, and cover them at the end of every workday or during wet weather or when rain is forecast.
- Arrange for appropriate disposal of all hazardous wastes.
- Fueling of equipment and vehicles will only occur in upland areas. When occurring within 100 feet of open or flowing water, secondary containment will be used while fueling.

BMP-8: **Noise Control Measures.** The following measures shall be incorporated into the Project construction specifications to reduce and control noise generated by construction-related activities:

- All construction equipment shall have sound-control devices no less effective than those provided on the original equipment.
- No equipment shall have an unmuffled exhaust.

- Stationary construction equipment shall be located as far as possible from sensitive uses; sensitive uses shall be identified on construction drawings; and excessive equipment idling (greater than five minutes) shall be prohibited when the equipment is not in use.

BMP-9: **Equipment Use and Conditions.** The following measures shall be incorporated into the Project construction specifications to reduce potential for vehicle collisions with wildlife:

- Operators of vehicles and equipment shall adhere to a maximum speed limit of 15 miles per hour for all vehicle movement on unpaved areas within the Project Area during construction. The windshield of any equipment or vehicle's windshield shall remain clear of dust or other material that may impact visibility.

BMP-10: **Non-Native Invasive Plant Species.** The following measures shall be incorporated into the Project construction specifications to reduce introduction and spread of non-native invasive plant species:

- Clothing, vehicles, and equipment (including shoes, equipment undercarriage and tires/tracks) should be cleaned prior to entering the Project Area and, if invasive plant species are known to occur within the Project Area, prior to entering an area of the Project-site that is free of invasive plants. Materials used for the Project, such as fill dirt or erosion control materials, should be from weed-free locations or certified weed free.

BMP-11: **Alameda Striped Racer Critical Habitat.** The following measures shall be incorporated into the Project construction specifications to minimize impacts to Alameda striped racer critical habitat:

- The District shall discuss potential impacts to Alameda striped racer critical habitat with the USFWS and shall implement any resulting additional BMPs.

BMP-12: **Biological Monitoring.** A qualified biologist or approved biological monitor will remain on-site during all initial grading, dirt work, or mechanical ground-disturbing activities in riparian areas or if rock outcroppings or scrub vegetation is removed. When the Project Area is not staffed by the biological monitor, a qualified biologist will be available to be at the site within two hours, if needed. The qualified biologist/biological monitor will be given the authority to stop any work that may result in the harm of special-status species. The qualified biologist/biological monitor will be the contact for any employee or contractor who might inadvertently kill or injure a listed species or anyone who finds a dead, injured or entrapped individual.

BMP-13: **Worker Awareness Training Program.** Prior to construction, a qualified biologist/biological monitor will conduct a construction employee education program in reference to potential special-status species and sensitive habitats on site. At a minimum, the program will provide an overview of relevant permit/agreement requirements, a description of special-status species potentially present, sensitive habitats on or near the site, avoidance areas and

avoidance measures to be implemented, and instruction on actions to take if wildlife species are observed. A list of employees who attend the training sessions will be maintained to be made available for review by the CDFW upon request. Contractor training will be incorporated into construction contracts and will be a component of weekly Project meetings.

BMP-14: **Preconstruction Survey.** A District Representative will conduct a preconstruction survey for special-status species immediately prior to groundbreaking activities. If at any point, construction activities cease for more than seven consecutive days, an additional preconstruction survey will be conducted prior to the resumption of work.

BMP-15: **Daily Clearance Survey.** The qualified biologist or biological monitor will conduct a clearance survey prior to the start of each workday. This will include walking the Project Area, and checking under construction equipment, Project vehicles, and their tires to ensure no species are utilizing the equipment as temporary shelter.

BMP-16: **Wildlife Relocation.** All wildlife species within harm's way will be given the opportunity to leave the work area on their own. With the exception of species protected by state or federal endangered species act(s), wildlife species may be removed from the work area by the qualified biologist/biological monitor in accordance with the approved conditions. Any relocated wildlife species will be moved to a safe area that provides suitable habitat. The relocation of any wildlife species will be documented in the daily monitoring logs and a summary report will be provided to EBRPD should the relocation of any special-status species be required.

BMP-17: **Exclusion Fencing.** Throughout the Project Area, a qualified biologist will make the determination as to whether exclusion fencing is necessary or appropriate to prevent harm to special-status species.

BMP-18: **Refuse Management.** All trash and debris within the work area will be placed in containers with secure lids before the end of each workday in order to reduce the likelihood of predators being attracted to the site by discarded food wrappers and other rubbish that may be left on-site. Containers will be emptied as necessary to prevent trash overflow onto the site and all rubbish will be disposed of at an appropriate off-site location.

BMP-19: **Adhere to Bay Area Air Quality Management District Basic Construction Best Management Practices.** The Project shall implement the following Bay Area Air Quality Management Construction Best Management Practices:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered as needed.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

- All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers as needed. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site as needed.
- 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.

2.8 Consistency with Local Plans and Policies

The Proposed Project is consistent with the mission of EBRPD to provide for the preservation of a rich heritage of natural and cultural resources and provide open spaces, parks, trails, safe and healthful recreation and environmental education. Additionally, the Proposed Project supports implementation of the EBRPD Master Plan, which was adopted in 2013, and included completion of the Calaveras Ridge Regional Trail. The Proposed Project is consistent with applicable local plans for both the City of Lafayette and City of Walnut Creek, and policies currently in effect.

2.9 Regulatory Requirements, Permits, and Approvals

The EBRPD is the CEQA Lead Agency for the Proposed Project. To approve Project construction, EBRPD Board of Directors must first comply with CEQA by adopting the IS/MND. The Board of Directors could then consider the information contained in the IS/MND in making its decision to approve or deny the Project, approve the construction plans, and file a Notice of Determination with the State Clearinghouse. Other approvals that may be required to implement the Project are described below.

2.9.1 Federal

- U.S. Fish and Wildlife Service (USFWS): Consultation under the federal Endangered Species Act (ESA) as necessary for federal agency actions (Sections 7 and 10 of the ESA).

2.9.2 State

- California Department of Fish and Wildlife (CDFW): Compliance with streambed alteration requirements (California Fish and Wildlife Code Section 1602) if any modification to watercourses or their adjacent riparian habitats would occur, and Section 2081 of the California ESA if take of listed species is likely to occur.

- The San Francisco Bay Regional Water Quality Control Board (RWQCB) implements water quality regulations under the federal Clean Water Act (CWA). These regulations require Section 401 water quality certification prior to issuance of any Section 404 permit, if required.

2.9.3 Local

- City of Lafayette Grading Permit: A Grading Permit is required if more than 50 cubic yards of soil is being moved. The intent is to ensure that grading minimizes impacts to drainage, erosion, and the natural features of the site.
- City of Walnut Creek Site Development Permit: A Site Development Permit is required for grading, drainage, site improvements that include any grading over 50 cubic yards.

2.10 Consultation with California Native American Tribe(s)

Assembly Bill (AB) 52 requires that prior to the release of a CEQA document for a project, an agency begin consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project if:

1. the California Native American tribe requested to the lead agency, in writing, to be informed by the Lead Agency through formal notification of proposed projects in the geographic area that is traditionally and culturally affiliated with the tribe; and,

2. the California Native American tribe responds in writing, within 30 days of receipt of the formal notification, and requests the consultation. (Insert Tribe Information).

Further information on potential Tribal Cultural Resources in the Project Area, is provided in Section 4.18 *Tribal Cultural Resources* of this IS/MND.

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3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental Factors

3.2 Potentially Affected

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

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

Determination

On the basis of this initial evaluation:

I find that the project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	☐
I find that although the project could have a significant effect on the environment, there will 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 will be prepared.	☒
I find that the project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.	☐
I find that the 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 although the project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.	☐

AGENCY REP NAME TITLE		Date

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4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

4.1.1.1 Visual Character of the Project Site

The Project Area is a linear corridor along a moderately rolling ridgeline referred to as Burton Ridge on the eastern edge of Lafayette. The Project Area is situated at an elevational range of approximately 215 to 800 feet above Mean Sea Level (MSL).

The Project Area is mostly undeveloped oak woodland and annual grassland and includes segments of paved public roads as well as unimproved roads and fences associated with low-density residential development. The Proposed Project is within a pocket of relatively undeveloped land surrounded by dense residential development to the north, east, and west, and an expanse of undeveloped land to the south.

Land uses in the Project Area include cattle grazing, utility corridors, residential ranch roads, as well as paved public access roads on the north and south ends of the Project Area. Similar land uses occur in the immediate vicinity of the Project Area with inclusion of public utilities such as the East Bay Municipal Utilities District Walnut Creek Water Tower. Higher density residential development in the vicinity of the Project Area increases to the north, east, and west as the slope of the landscape decreases.

4.1.1.2 Scenic Highways

The California Department of Transportation (Caltrans) implements the State Scenic Highway Program. The program lists officially designated scenic highways and eligible highways. The closest officially designated or eligible State Scenic Highway is State Route (SR) 24, which is immediately north of the Project Area, approximately 0.84 miles away (Caltrans 2024). SR-24 passes through the middle of the City of Lafayette in an east-west direction. It is a major regional freeway that begins in Oakland and then passes through Berkeley Hills via the Caldecott Tunnel before emerging near Orinda. The freeway passes through Lafayette before merging with I-680 in Walnut Creek. SR-24 through Lafayette is generally configured as an eight-lane freeway, with four travel lanes in each direction and Bay Area Rapid Transit's (BART's) Yellow Line occupying the freeway's median.

4.1.2 Regulatory Setting

4.1.2.1 Lafayette General Plan

The Lafayette General Plan is a comprehensive long-range general plan for the physical development of the City of Lafayette. General Plan goals and policies related to aesthetics and relevant to implementation of the Proposed Project are listed below:

Goal LU-1: Protect the character and pattern of development of residential neighborhoods.

Goal LU-2: Ensure that development respects the natural environment of Lafayette. Preserve the scenic quality of ridgelines, hills, creek areas, and trees.

Goal LU-5: Preserve and enhance the open space, scenic viewsheds, and semi-rural qualities around the residential entryways to Lafayette.

4.1.2.2 Walnut Creek General Plan

The Walnut Creek General Plan is a comprehensive long-range general plan for the physical development of the City of Walnut Creek. General Plan goals and policies related to aesthetics and relevant to implementation of the Proposed Project are listed below:

Goal 18: Preserve and enhance the visual amenity provided by the open spaces, hills, and creeks.

Policy 18.1: Preserve and enhance the urban connections to scenic views that are important to residents and visitors.

4.1.3 Aesthetics (I) Environmental Checklist and Discussion

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

Less Than Significant Impact

A scenic vista is a viewpoint that provides a distant view of highly valued natural or manmade landscape features for the benefit of the general public. Typical scenic vistas are locations where views of rivers, ocean, hillsides, and open space areas can be obtained as well as locations where valued urban landscape features can be viewed in the distance.

As described in the Project Description, Section 2, the new trail segments are located off Olympic Boulevard overlooking both the City of Lafayette and the City of Walnut Creek, then would continue to the south to Rohrer Drive and the Rohrer Trail. The proposed trail has a narrow profile and limited footprint and most segments are set back a significant distance from nearby residential homes. Additionally, the trail would be visually screened by the rolling topography, vegetation, and other natural features. No long-term significant effect on scenic vistas would result from implementation of the Project.

Project implementation would include the construction of new fencing that would border sections of the trail, but this fencing would be equestrian fencing, which would match the existing fencing within the Project Area.

Construction activities would require excavation of soil and removal of a limited amount of vegetation, primarily consisting of grass and shrubs. These activities would change the close-range scenery at the Project Area. These impacts would be considered temporary and, therefore, less than significant.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐

Less Than Significant Impact

The Project is situated between the City of Lafayette and the City of Walnut Creek and is approximately 0.84 miles away from SR 24. This highway is listed as officially designated as a California State Scenic Highway (Caltrans 2024). The trail will be located in areas where "volunteer" trails already exist from both human and horse use. The Proposed Project has been designed to avoid/reduce impacts to resources such as trees, wetland features, and rock outcroppings. Upon completion, trail improvements will not be visible from SR 24 and will not alter the current view from the highway. It is unlikely that highway travelers would see construction activities and staging/storage of equipment and vehicles, as trail construction would be obscured by the intervening topography. Regardless, construction impacts are considered temporary and less than significant and no mitigation is required.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Less Than Significant Impact

As described in Discussion (a) and (b) above, construction activities will include various treatments including graded earth and installation of a clear span bridge to cross the ephemeral drainage. The trail segments are intended to minimize impacts to the visual character of the area and will help blend the new features into the existing setting where possible. As with any construction project, a temporary decrease in the visual appeal of the areas immediately affected by the work being performed would occur. Debris will be removed from the site following construction, thus returning the site to pre-construction conditions. This impact is considered less than significant.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

No Impact

Lighting is not an element of this Project and all work will be conducted during daylight hours, and as such, no permanent new light sources will be introduced into the landscape. No component of the trail construction will produce a metallic shine or glare. Therefore, there will be no impact.

4.1.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.2 Agriculture Resources and Forestry Services

4.2.1 Environmental Setting

The Project Area features expansive grasslands and oak woodland between the City of Lafayette and the City of Walnut Creek. There are existing residences that are nearby the Proposed Project.

No existing farming or forestry operations are present within any area of the City of Lafayette. No areas of the City are specifically designated for or zoned for agricultural use. While the City's Zoning Code does provide for two agricultural zoning designations, General Agriculture (A-2) and Heavy Agriculture (A-3), no areas of the City are zoned with these designations (City of Lafayette 2022).

With respect to forestry resources, no existing timber harvest uses are located on or in the vicinity of the City of Lafayette. No areas of the City are designated or zoned for such a use.

The Project areas within the City of Lafayette are zoned Low-Density Residential District -5 (LDR 5) and Low-Density Residential District-10 (LDR).

The Project areas within the City of Walnut Creek are zoned Planned Development (PD) and the General Plan Designation is Medium Multi-Family (MFM). There are agricultural General Plan designations within Walnut Creek but they are located on the eastern edges of the City, while the Project Area is located on the southwestern side (City of Walnut Creek 2023 and 2024)

The Department of Conservation (DOC) has classified Important Farmland in Contra Costa County by the following categories:

- Prime Farmland – Farmland with the best combination of physical and chemical features able to sustain long-term production of agricultural crops.
- Farmland of Statewide Importance – Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture.

- Unique Farmland – Farmland of lesser quality soils used for the production of the state's leading agricultural crops.
- Farmland of Local Importance – Land of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee.
- Grazing Land – Land on which the existing vegetation is suited to the grazing of livestock.
- Urban and Built-up Land – Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel.
- Other Land – Land not included in any other mapping category is included as other land. Common examples include low-density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is also mapped as Other Land.

There are no agricultural or forestry land uses on or near the Project Area. The DOC Important Farmland Finder Map categorizes the site as grazing land, which is land on which the existing vegetation is suited to the grazing of livestock (DOC 2024a). Additionally, the Proposed Project Area is not under a Williamson Act Contract (DOC 2024b).

4.2.2 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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

No designated agricultural lands exist on the Project Area. The Proposed Project would not result in the conversion of farmland to a non-agricultural use. Therefore, no impacts would occur to farmlands.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

No Impact

The Project Area is not zoned for agriculture use and is not under a Williamson Act contract. Therefore, no impacts would occur to Williamson Act land.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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))?	☐	☐	☐	☒

No Impact

The Project Area is not located within zoned forest land or timberland. Therefore, there will be no impacts to existing zoning.

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact

The Proposed Project would not result in the loss or conversion of forest land to a non-forest use. No impacts would occur.

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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

No designated agricultural lands exist on or near the Project Area. The Proposed Project would not result in the conversion of farmland or forestland to a non-agricultural use. The Project Area is not zoned for agriculture and is not under a Williamson Act contract. No impacts would occur.

4.2.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.3 Air Quality

This section is based on the analysis and recommendations presented in the Emissions Assessment Memorandum prepared for the proposed Calaveras Ridge Trail Project (Appendix A, ECORP 2024a).

4.3.1 Environmental Setting

The Proposed Project is located primarily within the City of Lafayette. The California Air Resource Board (CARB) has divided California into regional air basins according to topographic features. Contra Costa County is located in a region identified as the San Francisco Bay Area Air Basin (SFBAAB). The SFBAAB is approximately 5,600 square miles in area and consists of nine counties that surround the San Francisco Bay, including all of Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa Counties; the southwestern portion of Solano County; and the southern portion of Sonoma County. The topography of the SFBAAB is characterized by complex terrain, consisting of coastal mountain ranges, inland valleys and bays. This complex terrain, especially the higher elevations, distorts the normal wind flow patterns in the SFBAAB. The greatest distortions occur when low-level inversions are present and the air beneath the inversion flows independently of air above the inversion, a condition that is common in the summertime.

Both the U.S. Environmental Protection Agency (USEPA) and CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O_3), carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO_2), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The Contra Costa County (County) portion of the SFBAAB, which encompasses the Project Area, is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is designated nonattainment area for the state standards for O_3, $PM_{2.5}$, and PM_{10} (CARB 2022).

The local air quality regulating authority in the portion of Contra Costa County encompassing the Project Area is the Bay Area Air Quality Management District (BAAQMD). The BAAQMD's primary responsibility is ensuring that the National Ambient Air Quality Standards and California Ambient Air Quality Standards are attained and maintained in the Contra Costa County portion of the SFBAAB. The BAAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities.

The following provisions are applicable to the Proposed Project are summarized as follows:

- **Regulation 6, Rule 6, Prohibition of Trackout:** Controls trackout of solid material onto public paved roads from three types of sites: large bulk material sites, large construction sites, and large disturbed area sites. Under this regulation, the owners and operators of a construction site are required to clean up trackout on public roadways within four hours of identification and at the conclusion of each workday. The rule also includes requirements regarding the emission of fugitive dust during cleanup of trackout, and requirements for monitoring and reporting trackout at regulated sites.
- **Regulation 7, Odorous Substances:** Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. A person (or facility) must meet all limitations of this regulation but meeting such limitations shall not exempt such person from any other requirements of BAAQMD, state, or national law. The limitations of this regulation shall not be applicable until BAAQMD receives odor complaints from ten or more complainants within a 90-day period, alleging that a person has caused odors perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel, or residence. When the limits of this regulation become effective, as a result of citizen complaints described above, the limits shall remain effective until such time as no citizen complaints have been received by BAAQMD for one year. The limits of this Regulation shall become applicable again if BAAQMD receives odor complaints from five or more complainants within a 90-day period. BAAQMD staff investigate and track all odor complaints it receives and make attempts to visit the site and identify the source of the objectionable odor and assist the owner or facility in finding a way to reduce the odor.

4.3.1.1 BAAQMD Best Management Practices

The BAAQMD recommends quantifying a Proposed Project's construction-generated emissions by implementing the Basic Best Management Practices (BMPs) for dust and exhaust construction impacts in CEQA compliance documentation. If additional construction measures are required to reduce construction-generated emissions, the Enhanced BMPs should then be applied. Table 4.3-1 identifies the Basic and Enhanced BMPs. In addition, all projects must implement any applicable air toxic control measures. For example, projects that have the potential to disturb asbestos (from soil or building materials) must comply with all the requirements of CARB's air toxic control measures for construction and grading.

Table 4.3-1. BAAQMD Basic and Enhanced Construction Best Management Practices

BAAQMD Basic Construction Best Management Practices
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.

Table 4.3-1. BAAQMD Basic and Enhanced Construction Best Management Practices
All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
All vehicle speeds on unpaved roads shall be limited to 15 mph.
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 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.
BAAQMD Enhanced Best Management Practices
Limit the simultaneous occurrence of excavation, grading, and ground-disturbing construction activities.
Install wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50 percent air porosity.
Plant vegetative ground cover (e.g., fast-germinating native grass seed) in disturbed areas as soon as possible and watered appropriately until vegetation is established.
Install sandbags or other erosion control measures to prevent silt runoff to public roadways from sites with a slope greater than one percent.
Minimize the amount of excavated material or waste materials stored at the site.
Hydroseed or apply non-toxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.

Note: BAAQMD = Bay Area Air Quality Management District; mph = miles per hour

4.3.2 Air Quality (III) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

No Impact

The BAAQMD is the agency responsible for enforcing many federal and state air quality requirements and for establishing air quality rules and regulations. The BAAQMD attains and maintains air quality conditions in Contra Costa County through a comprehensive program of planning, regulation, enforcement, technical

innovation, and promotion of the understanding of air quality issues. The most recently adopted air quality plan is the BAAQMD's 2017 Clean Air Plan, the primary goals of which are to protect public health and the climate. The 2017 Clean Air Plan includes a wide range of control measures and actions to reduce combustion-related activities, decrease combustion of fossil fuels, improve energy efficiency, and reduce emissions of potent greenhouse gases. Several measures address the reduction of multiple pollutants such as O_3 precursors, PM, air toxics, and Greenhouse Gas (GHG) emissions.

Determination of whether a project supports the goals in the 2017 Clean Air Plan is achieved by a comparison of project-estimated emissions with BAAQMD thresholds of significance. If project emissions would not exceed the thresholds of significance after the application of all feasible mitigation measures, the project is consistent with the goals of the 2017 Clean Air Plan. As shown in Table 4.3-2 below, emissions generated during Project construction and operations would not exceed the BAAQMD's significance thresholds. Once construction is complete the Project would contribute a minimal amount of operational air quality emissions as the Project is proposing improvements to an existing trail network. Therefore, the Project would not conflict with or obstruct reduction measures presented in the 2017 Clean Air Plan. There would be no impact.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐

Less Than Significant Impact

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the Project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Air quality impacts were assessed in accordance with methodologies recommended by the BAAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. CalEEMod provides the ability to analyze a project based on California air quality standards. Project construction generated air pollutant emissions were calculated using CalEEMod model defaults for Contra Costa County and the anticipated construction equipment identified by the East Bay Parks District. As the Project proposes the construction of 2.5- miles of new trail, 0.7 mile of 54-inch tall equestrian style fencing, approximately 10 access gates, and a small footbridge as well as excavation and grading activities, as stated in the Project Description. Based on this information the disturbed area was conservatively modeled as 7.27 acres. Additionally, the export of

10,000 cubic yards of soil from the Project Area was accounted for. It is noted that the CalEEMod model cannot specifically account for the construction of a park trail due to the limited land uses available within the model and therefore such activity is modeled as a non-asphalt surface in the CalEEMod Model. As the Project proposes constructing a new trail within an existing trail network, operational emissions are discussed qualitatively.

4.3.2.1 Project Construction

Construction Significance Analysis

Emissions associated with Project construction would be temporary and short-term but have the potential to represent a significant air quality impact. The basic sources of short-term emissions that will be generated through construction of the Proposed Project include operation of the construction vehicles (i.e., tractors, forklifts, pavers) as well as the creation of fugitive dust during clearing and grading activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation.

Construction-generated emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted average daily construction-generated emissions for the Proposed Project are summarized in Table 4.3-2. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the BAAQMD's thresholds of significance.

Table 4.3-2. Construction-Related Emissions

Construction Year	Pollutant (average pounds per day)					
	ROG	**NO_X**	**PM_{10} (exhaust)**	**$PM_{2.5}$ (exhaust)**	**PM_{10} (fugitive dust)**	**$PM_{2.5}$ (fugitive dust)**
Construction Calendar Year One	0.42	3.98	0.16	0.14	0.40	0.18
BAAQMD Potentially Significant Impact Threshold	*54*	*54*	*82*	*82*	*Basic Construction Best Management Practices*	*Basic Construction Best Management Practices*
Exceed BAAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Table 4.3-2. Construction-Related Emissions						
Construction Year	**Pollutant (average pounds per day)**					
	ROG	**NO_X**	**PM_{10} (exhaust)**	**$PM_{2.5}$ (exhaust)**	**PM_{10} (fugitive dust)**	**$PM_{2.5}$ (fugitive dust)**

Source: California Emissions Estimator Model (CalEEMod) version 2022.1. Refer to Appendix A for Model Data Outputs.

Notes: Emissions estimates account for the quantifiable dust-reduction measures that are also approved methods within the BAAQMD Basic Construction Best Management Practices, such as watering unpaved portions of the construction site twice daily and limiting off-road equipment to slower speeds. Emission calculations account for the conservative estimate of 4.48 acres of trail being constructed and the export of 10,000 cubic yards of soil.
BAAQMD = Bay Area Air Quality Management District; NO_x = Nitric Oxide; $PM_{2.5}$ = Fine Particulate Matter; PM_{10} = Coarse Particulate Matter; ROG = Reactive Organic Gas

As shown in Table 4.3-2, emissions generated during Project construction would not exceed the BAAQMD's numeric thresholds of significance during construction. It is noted that the BAAQMD thresholds for fugitive dust emissions are not numeric, but instead rely on the implementation of BAAQMD BMPs (see Table 4.3-1 above) to be considered less than significant. Thus, the Proposed Project would need to incorporate BAAQMD Basic BMPs in order to be considered less than significant. This requirement is contained in BMP-11. With implementation of BMP-11, this impact is less than significant and criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable state ambient air quality standard, and no health effects from Project criteria pollutants would occur.

4.3.2.2 Operational Emissions

Operational Significance Analysis

The Project is proposing the construction of a new 1.2-mile regional trail on undeveloped land and a new 1.3-mile regional trail within an existing roadway, totaling 2.5-miles. This expansion would connect and enhance the existing trail network. Beyond current conditions, the Project would contribute a minimal amount of operational air quality emissions from new visitors to the Project Area and the use of equipment for trail maintenance. Thus, the increases in any criteria pollutant emissions associated with Project operations would not be substantial and would not exceed the BAAQMD's numeric thresholds of significance during operations. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Less Than Significant Impact

4.3.2.3 Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter, ROG, NO_x, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SFBAAB which encompasses the Project Area is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards, designated nonattainment area for the state standards for O_3, $PM_{2.5}$, and PM_{10} (CARB 2022). Thus, existing O_3, $PM_{2.5}$, and PM_{10} levels in the SFBAAB are at unhealthy levels during certain periods. However, as shown in Table 4.3-2, the Project would not exceed the applicable significance thresholds for emissions. Therefore, Project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

Operational Air Contaminants

Examples of projects that emit toxic pollutants over long-term operations include oil and gas processing, gasoline dispensing, dry cleaning, electronic and parts manufacturing, medical equipment sterilization, freeways, and rail yards. The Project would not result in the development of any substantial sources of air toxics. There are no permanent stationary sources associated with the operations of the Project; nor would the Project attract mobile sources that spend long periods queuing and idling at the site. Therefore, there would not be significant concentrations of pollutants at nearby sensitive receptors. The Project would not be a source of toxic air contaminants. The Project would not result in a high carcinogenic or non-carcinogenic risk during operation. A less than significant impact would occur.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SFBAAB is designated as in attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The BAAQMD concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact. The Project is proposing the construction of a new regional trail totaling 2.5-miles within an existing trail network. As the Project is proposing improvements to an existing use it is anticipated that it would result in a minimal contribution to traffic trips in the Project Area. Thus, the Proposed Project would not generate traffic volumes of more than 44,000 vehicles per day. There is no likelihood of the Project traffic exceeding CO values.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

No Impact

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective.

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses identified as being associated with odors. Therefore, there is no impact from the Proposed Project on odors.

4.3.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required. However, BMPs have been identified for the Project and are listed below:

BMP-11: Adhere to Bay Area Air Quality Management District Basic Construction Best Management Practices. The Project shall implement the following Bay Area Air Quality Management Construction Best Management Practices:

- 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 track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 mph.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- 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.

4.4 Biological Resources

This section is based on the analysis and recommendations presented in the Biological Resource Assessment (BRA) prepared for the Proposed Calaveras Ridge Trail Project (Appendix B, ECORP 2024b).

Appendix B includes a full list of the biological and natural resources regulatory requirements that are relevant to this Project as well as details regarding completed biological surveys for the Project. Completed biological surveys to-date include site reconnaissance to support the BRA, an aquatic resources delineation, and a special-status plant survey.

The 10.50-acre Biological Study Area (BSA) comprises the Project Area and the Survey Area (Figure 2 within Appendix B). The Project Area comprises areas where the new trail will be constructed plus a 25-foot buffer on either side of the centerline, in addition to the existing access roads that will be opened for public use as part of the Project but where no ground- or vegetation-disturbing work will occur during Project construction. The Survey Area comprises areas where focused surveys were conducted, which includes the entire Project Area except for the existing access roads, and an additional area that is no longer part of the Project. No permanent impacts will occur outside of the Survey Area.

4.4.1 Environmental Setting

The District proposes to create a public trail from Olympic Boulevard south to Rohrer Drive following Burton Ridge. The Project Area location is described in more detail in Section 1.2.

The Project would utilize approximately 1.3 miles of existing access roads and construct 1.2 miles of new trail to connect the existing road segments. The new trail segment would follow the confines of the physical geography of the Project Area and utilize its topography to minimize impacts to known habitats. Minimal tree trimming may be required, but no tree removal is proposed for implementation of the Project. Two ephemeral drainages cross the proposed trail alignment, but one is culverted and, therefore, will not be impacted, and the other would be crossed with a new clear span bridge to avoid aquatic features.

The 10.5-acre BSA corresponds to a portion of Section 33, Township 01 North, Range 02 West and Sections 4 and 9, Township 01 South, Range 02 West (Mount Diablo Base and Meridian) of the "Trampas Ridge, California" and "Walnut Creek, California" 7.5-minute quadrangles. The approximate center of the BSA is located at 37.875259° North and -122.087903° West within the Suisun Bay Watershed (Hydrological Unit Code 18050001; Natural Resources Conservation Service [NRCS] et al. 2024).

4.4.1.1 Vegetation Communities

The following sections describe vegetation communities and land cover types within the BSA as observed during the site reconnaissance. Appendix B includes a list of all plants observed and describes the approximate extent of vegetation communities and land cover types within the Survey Area.

Annual Grassland

The BSA contains approximately 5.17 acres of annual grassland characterized as wild oats and brome grasslands (*Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance). This is the most extensive type of non-native grassland in cismontane California; it is characterized by a dominance of non-native herbaceous grasses and forbs (multiple species may be dominant or codominant), and emergent trees or shrubs may be present at low cover. This alliance occurs in all topographic settings in foothills, waste places, rangelands, and openings in woodlands.

The annual grassland within the BSA is located mostly in the northern and southern portions and is dominated by slender wild oat (*Avena barbata*) with rose clover (*Trifolium hirtum*) and vetch (*Vicia* spp.) as the dominant forbs. Soft brome (*Bromus hordeaceus*) and hill morning glory (*Calystegia subacaulis* ssp. *subacaulis*) are predominant in areas with more level terrain and shallower soils. A few individuals or small patches (less than 20 square feet) of purple needle grass (*Stipa pulchra*) are present within the annual grassland; however, no patches area large enough to be considered a native grassland stand per the minimum mapping unit for this effort or per *Manual of California Vegetation* standards.

Semi-natural alliances are strongly dominated by nonnative plants that have become naturalized in the State, do not have state rarity rankings, and are not considered sensitive natural communities.

Coast Live Oak Woodland

The BSA contains approximately 1.61 acres of coast live oak woodland (*Quercus agrifolia* Forest & Woodland Alliance). This alliance is characterized by coast live oak dominant or codominant, a canopy that ranges from savannah-like to continuous, a sparse to intermittent shrub layer, and an herbaceous layer that is sparse or grassy. This alliance occurs in canyon bottoms, slopes and flats with deep soils that are sandy of loamy with high organic matter.

Coast live oak woodland is found mostly in the northern portion of the BSA. Coast live oak is strongly dominant in the majority of the BSA, but valley oak (*Quercus lobata*) is dominant or co-dominant with coast live oak in a couple smaller patches in the woodland. Slender wild oat is dominant in the understory with Italian thistle (*Carduus pycnocephalus*) as the dominant forb.

Coast live oak woodland has a state rarity ranking of S4 and is not considered a sensitive natural community. There are rare associations within the alliance but the vegetation composition of the coast live oak woodland within the BSA most resembles the *Quercus agrifolia*/grass association, which has a state rarity ranking of S4 and is not a rare association. However, oak woodlands are considered a sensitive resource under the California Oak Woodlands Conservation Act.

Valley oak woodland (*Quercus lobata* Woodland Alliance) may be present in the areas with valley oak dominant. However, protocol-level vegetation mapping would be needed to make that determination. Valley oak woodland has a state rarity ranking of S3 and is considered a sensitive natural community.

Arroyo Willow Thickets

The BSA contains approximately 0.03 acre of riparian habitat characterized as arroyo willow thickets (*Salix lasiolepis* Shrubland Alliance). This alliance is characterized by plants less than 10 meters high with an open to continuous canopy and arroyo willow as dominant or codominant, in addition to a variable herbaceous layer. As a shrubland, emergent trees may be present at low cover. This alliance occurs on streambanks and benches, slope seeps, and stringers along drainages.

The BSA includes the edge of the canopy of this vegetation community, which is found in the southern portion of the BSA at the top of a draw adjacent to a residential property (Appendix B, Figure 4). Predominant vegetation includes arroyo willow intermixed with shrubby Coast live oak, Himalayan blackberry (*Rubus armeniacus*), and poison hemlock (*Conium maculatum*).

The arroyo willow thickets has a state rarity ranking of S4 and is not considered a sensitive natural community. Rare associations are present within the alliance, but the vegetation composition of the arroyo willow thickets within the BSA most resembles the *Salix lasiolepis* – *Rubus* spp. association which has a state rarity ranking of S4 and is not a rare association.

Disturbed/Developed

The disturbed or developed land cover type mainly consists of unimproved dirt/gravel single-lane private access roads, short segments of hardened access roads, short segments of three paved public roads

(Olympic Boulevard in the northern portion of the BSA, and Lucas Drive and Oak Canyon Road in the southern portion), and portions of maintained residential yards.

The roadways are mostly devoid of vegetation and have disturbed (mowed, graded, or disced) shoulders. Less maintained roads have vegetation in the center and edges. Vegetation within roadways have similar composition to the grassland with higher density of non-native invasive species such as yellow-star-thistle (*Centaurea solstitialis*) where adjacent to the grassland, and the edge of the oak canopy where adjacent to the oak woodland. Residential yards within the BSA are mostly mowed or otherwise maintained, and include species found in the grassland and a higher concentration of ruderal species including Italian thistle, spiny cocklebur (*Xanthium spinosum*), and planted vegetation such as giant reed (*Arundo donax*) and Aleppo pine (*Pinus halepense*). The Olympic Boulevard sidewalk has planted vegetation, including society garlic (*Tulbaghia violacea*) and lily turf (*Liriope spicata*). Valley oaks and a planted Siberian elm (*Ulmus pumila*) edge Oak Canyon Road.

4.4.1.2 Aquatic Resources

The Aquatic Resources Delineation, which is included in Appendix B, identified one intermittent drainage and two ephemeral drainages within the BSA. The intermittent drainage is outside of the Project Area. The ephemeral drainages are within the Project Area. These features are further described in the following sections and can be seen within Figure 4.4-1.

Ephemeral Drainage

Ephemeral drainages are linear features that exhibit a bed and bank and an Ordinary High Water Mark (OHWM). These features typically convey runoff for short periods of time, during and immediately following rain events, and are not influenced by groundwater sources at any time during the year.

There are two ephemeral drainages in the Project Area. The northernmost ephemeral drainage is located on the southern end of the fork in the BSA alignment and supports a patch of many-flowered wild-rye (*Elymus* x *gouldii*). The southernmost ephemeral drainage is culverted and located between a residential property and the arroyo willow thickets vegetation community. Himalayan blackberry and tall flatsedge (*Cyperus eragrostis*) are predominant in the ephemeral drainage

Intermittent Drainage

Intermittent drainages are linear features that exhibit a bed and bank, an OHWM, and flow for weeks or months following significant precipitation events. Intermittent drainages differ from ephemeral drainages in that they flow for longer duration and are influenced by groundwater sources.

There is one intermittent drainage in the BSA. This drainage is located outside of the Project Area in the northern portion of the BSA. The drainage flows through Coast live oak woodland with valley oak dominant in the canopy, scattered buckeye (*Aesculus californica*), and herbaceous vegetation dominated by ripgut brome (*Bromus diandrus)* in the understory.

Map Contents

- Biological Study Area - 10.50 ac.
- Survey Area - 8.93 ac.
- Reference Coordinate

Sample Point

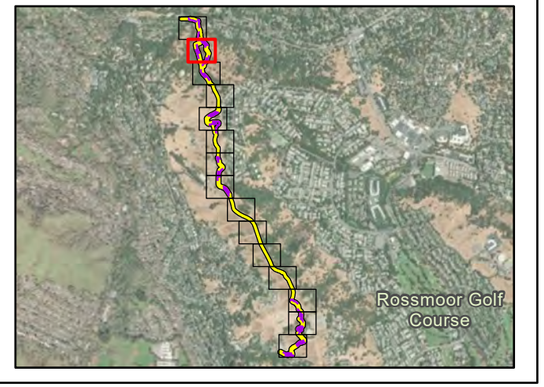
- OHWM Transect

Aquatic Resource Type

- Intermittent Drainage

Photo Source: Maxar (2022)
Boundary Source: East Bay Regional Park District
Delineator(s): Stephanie Castle
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.
The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.



Location: N:\2023\2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity\MAPS\Aquatic_Resources\CRTBRV Aquatic Resources.aprx - CRTBRV ARD 20240831 (jwelsh - 9/3/2024)

Map Date: 9/3/2024

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 30 60

Figure 4.4-1. Aquatic Resources Delineation Sheet 1 of 3

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Map Contents

- Biological Study Area - 10.50 ac.
- Survey Area - 8.93 ac.

Sample Point

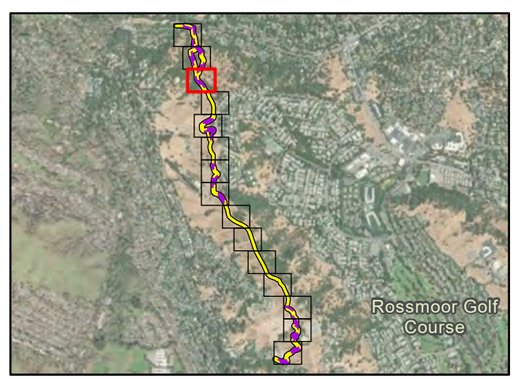
- OHWM Transect

Aquatic Resource Type

- Ephemeral Drainage

Photo Source: Maxar (2022)
Boundary Source: East Bay Regional Park District
Delineator(s): Stephanie Castle
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.
The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.



Location: N:\2023\2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity\MAPS\Aquatic_Resources\CRTBRV Aquatic Resources.aprx - CRTBRV ARD 20240831 (jwelsh - 9/3/2024)

Map Date: 9/3/2024

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 30 60

Figure 4.4-1. Aquatic Resources Delineation Sheet 2 of 3

2023-136.01/ Calaveras Ridge Trail Burton Ridge Vicinity

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Map Contents

- Biological Study Area - 10.50 ac.
- Survey Area - 8.93 ac.

ARD Point Type

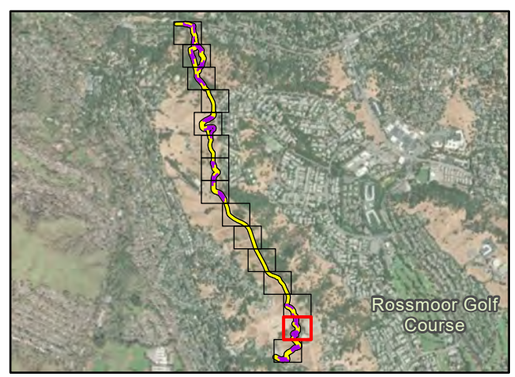
- ARD Culvert Point

Aquatic Resource Type

- Ephemeral Drainage

Photo Source: Maxar (2022)
Boundary Source: East Bay Regional Park District
Delineator(s): Stephanie Castle
Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.
The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.



Location: N:\2023\2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity\MAPS\Aquatic_Resources\CRTBRV Aquatic Resources.aprx - CRTBRV ARD 20240831 (jwelsh - 9/3/2024)

Map Date: 9/3/2024

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 30 60

Figure 4.4-1. Aquatic Resources Delineation Sheet 3 of 3

2023-136.01/ Calaveras Ridge Trail Burton Ridge Vicinity

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4.4.1.3 Wildlife

The oak woodland and grassland habitats within the BSA support a variety of common wildlife species including black-tailed deer (*Odocoileus hemionus columbianus*), coyote (*Canis latrans*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), bats, California ground squirrel (*Otospermophilus beecheyi*), northern Pacific rattlesnake (*Crotalus oreganus*), California alligator lizard (*Elgaria multicarinata*), and western fence lizard (*Sceloporus occidentalis*), as well as a variety of native and naturalized birds, including red-tailed hawk (*Buteo jamaicensis*), wild turkey (*Meleagris gallopavo*), California quail (*Callipepla californica*), mourning dove (*Zenaida macroura*), red-shouldered hawk (*Buteo lineatus*), acorn woodpecker (*Melanerpes formicivorus*), Nuttall's Woodpecker (*Dryobates nuttallii*), oak titmouse (*Baeolophus inornatus*), and white-breasted nuthatch (*Sitta carolinensis*), among others. Some bird species detected within the BSA during the site reconnaissance are special-status wildlife species.

4.4.1.4 Special-Status Species

Appendix G of the BRA (Appendix B, ECORP 2024b) provides a list of all the special-status plant and wildlife species identified as potentially occurring within the BSA. This list was created based on a review of literature and database searches including the CDFW California Natural Diversity Database, California Native Plant Society (CNPS) Rare Plant Inventory, USFWS Information for Planning and Consultation, and National Marine Fisheries Service Resources data, as further described in Appendix B. This provides the listing status for each species, a brief habitat description, and a determination on the potential to occur within the BSA. The following sections briefly describe and discuss the 9 special-status species that are either listed or are candidates for listing under the California or federal ESAs and could potentially occur within the BSA.

Special-Status Plants

Robust Spineflower

Robust spineflower (*Chorizanthe robusta* var. *robusta*) is listed as endangered pursuant to the federal ESA, is not listed pursuant to the California ESA, and is designated as a California Rare Plant Rank (CRPR) 1B.1 species. This species is an herbaceous annual that occurs in sandy or gravelly soils within maritime chaparral, cismontane woodland, coastal dunes, and coastal scrub. Robust spineflower blooms from April through September and is known to occur at elevations ranging from 10 to 985 feet above MSL. Robust spineflower is endemic to California; its current range includes Alameda, Santa Clara, Santa Cruz, San Francisco, and San Mateo counties. It is most likely extirpated from Alameda, Santa Clara, and San Mateo counties.

There are no California Natural Diversity Database (CNDDB) occurrences of robust spineflower within 5 miles of the BSA. The oak woodland within the BSA may provide marginally suitable habitat. Robust spineflower has low potential to occur within the BSA. However, this species is presumed absent within the BSA at the current time based on the results of the recent special-status plant survey.

Santa Cruz Tarplant

Santa Cruz tarplant (*Holocarpha macradenia*) is listed as threatened pursuant to the federal ESA, is listed as endangered pursuant to the California ESA, and is designated as a CRPR 1B.1 species. This species is an annual herb that occurs in coastal prairie, coastal scrub, and valley and foothill grassland, often on clay or sandy substrates. Santa Cruz tarplant blooms from June through October and is known to occur at elevations ranging from 35 to 720 feet above MSL. Santa Cruz tarplant is endemic to California; the current range of this species includes Alameda, Contra Costa, Monterey, Marin, and Santa Cruz counties. It is presumed extirpated in Alameda, Contra Costa, and Marin counties.

There are no CNDDB occurrences of Santa Cruz tarplant within 5 miles of the BSA. The grassland within the BSA may provide marginally suitable habitat. Santa Cruz tarplant has low potential to occur within the BSA. However, this species is presumed absent within the BSA at the current time based on results of the recent special-status plant survey.

Contra Costa Goldfields

Contra Costa goldfields (*Lasthenia conjugens*) is listed as endangered pursuant to the federal ESA, is not listed pursuant to the California ESA, and is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in mesic sites within cismontane woodland, playas with alkaline soils, valley and foothill grassland, and vernal pools. Contra Costa goldfields blooms from March through June and is known to occur at elevations ranging from 0 to 1,540 feet above MSL. Contra Costa goldfields is endemic to California; its current range includes Alameda, Contra Costa, Mendocino, Monterey, Marin, Napa, Santa Barbara, Santa Clara, Solano, and Sonoma counties. It is likely extirpated from Mendocino, Santa Barbara, and Santa Clara counties.

There is one CNDDB occurrence of Contra Costa goldfields within 5 miles of the BSA. The oak woodland and grassland may provide marginally suitable habitat. Contra Costa goldfields has low potential to occur within the BSA. However, this species is presumed absent within the BSA at the current time based on results of the recent special-status plant survey.

San Francisco Popcornflower

San Francisco popcornflower (*Plagiobothrys diffusus*) is not listed pursuant to the federal ESA, is listed as endangered pursuant to the California ESA, and is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in coastal prairie and valley and foothill grassland. San Francisco popcornflower blooms from March through June and is known to occur at elevations between 195 to 1,180 feet above MSL. San Francisco popcornflower is endemic to California; the current range of this species includes Alameda, San Benito, Santa Cruz, San Francisco, and San Mateo counties. This species is currently presumed extirpated in San Francisco County.

There are no CNDDB occurrences of San Francisco popcornflower within 5 miles of the BSA. The grassland within the BSA may provide marginally suitable habitat. San Francisco popcornflower has low potential to occur within the BSA. However, this species is presumed absent within the BSA at the current time based on results of the recent special-status plant survey.

Special-Status Invertebrates

Western Bumble Bee

The western bumble bee (*Bombus occidentalis*) is a candidate for listing as endangered under the California ESA. The western bumble bee was once common in the western United States but is now absent across much of its historic range.

There are 5 CNDDB occurrences of western bumble bee within 5 miles of the BSA. The grassland, openings in the woodland and disturbed areas may provide suitable foraging, nesting, and overwintering habitat. However, all occurrences in the vicinity are historic, and the BSA may be outside of the current known geographical range for this species. Thus, western bumble bee has low potential to occur within the BSA.

Crotch's's Bumble Bee

The Crotch's bumble bee (*Bombus crotchii*) is a candidate for listing as endangered under the California ESA. The historic range of the Crotch's bumble bee extends from coastal areas east to the edges of the desert in central California south to Baja California del Norte, Mexico, excluding mountainous areas. The species was historically common throughout the southern two-thirds of its range but is now largely absent from much of that area and is nearly extirpated from the center of its historic range, the Central Valley.

The Crotch's bumble bee inhabits open grassland and scrub habitats. The species visits a wide variety of flowering plants, although its very short tongue makes it best suited to forage at open flowers with short corollas. Plant families most commonly associated with Crotch's bumble bee include Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae. The species primarily nests underground. Little is known about overwintering sites for the species, but bumble bees generally overwinter in soft, disturbed soils or under leaf litter or other debris. The flight period for Crotch's bumble bee queens in California is from late February to late October, peaking in early April with a second pulse in July. The flight period for workers and males is California is from late March through September with peak abundance in early July.

There are no CNDDB occurrences of Crotch's bumble bee within 5 miles of the BSA. However, the grassland, openings in the woodland, and disturbed areas may provide suitable foraging, nesting, and overwintering habitat; therefore, the Crotch's bumble bee has potential to occur within the BSA.. Crotch's bumble bee has potential to occur within the BSA.

Monarch

The monarch (*Danaus plexippus*) is a candidate for listing under the federal ESA. This butterfly occurs throughout a variety of habitats and requires blooming nectar resources for adults to feed on during breeding and migration and milkweed (*Asclepias* spp.) for oviposition and larval feeding. During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily *Asclepias* spp.). Larvae emerge after 2 to 5 days and then develop through five larval instars over a period of 9 to 18 days, feeding on milkweed and sequestering toxic cardenolides as a defense against predators. The larvae then pupate into chrysalis before emerging 6 to 14 days later as an adult butterfly. Multiple generations of

monarchs are produced during the breeding season, with most adult butterflies living approximately 2 to 5 weeks. Overwintering adults enter reproductive diapause and live 6 to 9 months.

In many regions where monarchs are present, monarchs breed year-round. Individual monarchs in temperate climates, such as eastern and western North America, undergo long-distance migration. Monarchs may use a variety of roosting trees along fall migration routes. Migratory individuals of eastern and western North America require a specific microclimate at overwintering sites that provides protection from the elements and moderate temperatures. Migratory monarchs in the western population primarily overwinter in groves of a variety of tree species along the coast of California and Baja California.

There are no CNDDB occurrences of the monarch within 5 miles of the BSA or known overwintering sites in the vicinity. This species has potential to occur as a nectaring and foraging species, but the BSA is unlikely to serve as an overwintering site due to distance from the coast. Therefore, monarch has low potential to occur within the BSA.

Special-Status Amphibians

California Red-Legged Frog

The California red-legged frog (CRLF) is listed as Threatened pursuant to the federal ESA and is a California Species of Special Concern. The current range and abundance of CRLF is greatly reduced from historic levels, with most remaining populations occurring along the coast from Marin County to Ventura County and in blue oak woodland, foothill pine/oak, and riparian deciduous forests in the foothills of the western slope of the Sierra Nevada.

Breeding habitat includes coastal lagoons, marshes, springs, permanent and semi-permanent natural ponds, and ponded and backwater portions of streams. Creeks and ponds with dense growths of woody riparian vegetation, especially willows (*Salix* spp.) are preferred. Adult CRLFs use dense, shrubby or emergent riparian vegetation near deep (≥ 0.6 to 0.9 m [2 to 3 feet]), still or slow-moving water, especially where dense stands of overhanging willow and an intermixed fringe of cattail (*Typha* sp.) occur adjacent to open water. CRLFs breed from November through April, and larvae generally metamorphose by mid to late summer. Upland and riparian areas provide important sheltering habitat during summer when CRLFs aestivate in dense vegetation, burrows, and leaf litter.

There are 9 CNDDB occurrences of CRLF within 5 miles of the BSA. There is no suitable aquatic breeding habitat for CRLF within the BSA, but the existing riparian habitat, ephemeral drainages and intermittent drainage with the BSA provide sheltering and movement habitat for this species. CRLF could disperse across upland habitat (grassland and oak woodland) within the BSA during rain events. Therefore, CRLF has potential to occur within the BSA.

Reptiles

Alameda Striped Racer

The Alameda striped racer (*Coluber lateralis euryxanthus*; also known as Alameda whipsnake) is listed as threatened pursuant to the federal and California ESAs. The Alameda striped racer is a narrow, medium

sized (up to 1.5 meters), snake of the widespread family Colubridae. Found only in Alameda and Contra Costa counties, and tentatively in Santa Clara and San Joaquin counties, this snake is an isolated subspecies of the much more widespread California striped racer (*C. l. lateralis*), which is found throughout chaparral and foothill transition zones in California and northern Baja California. In 1997 the Alameda striped racer was listed as threatened under the federal ESA. Preceding the federal listing, in 1971 California listed the Alameda striped racer as threatened under the California ESA. Critical habitat was designated by USFWS in 2006, and 0.2 acre of the BSA is located in designated critical habitat.

This snake is found in foothills, chaparral, and scrub habitats in the eastern San Francisco Bay Area. Common microhabitat associations include rocky outcrops and talus slopes in an open or broken canopy, usually with a south-, southeastern-, southwestern- or northeast-facing aspect. Alameda striped racers also use grasslands and oak woodlands, but the degree to which they use them, as well as the timing and duration of excursions into these habitats, is unknown. Even in grasslands and woodlands, rock outcrops are considered an essential feature of Alameda striped racer habitat because they provide retreats and positively favor lizard populations. The Alameda striped racer can occupy burrows and other subterranean refuges. They can often go into trees, and may flee there when pursued. There is some evidence that their use of grasslands is higher in the spring.

Courtship and mating for the Alameda striped racer occur from late-March through May, either terrestrially or in shrubs or other vertical structure. During spring and early summer, both males and females are foraging and seeking mates. Once gravid, the female will search out a suitable egg-laying site, thought to be in adjacent grassland.

Urban development has fragmented the range of this species into five populations in the inner coast range in western and central Contra Costa and Alameda counties. These five populations are located in Sobrante Ridge, the Oakland Hills, the Hayward Hills, Mount Diablo vicinity/Black Hills, and Wauhab Ridge. Seven recovery units were designated in USFWS' *Draft Recovery Plan for Chaparral and Scrub Community Species East of San Francisco Bay, California* (as cited in Appendix B). These recovery units correspond to the five populations, plus two recovery corridors (Caldecott Tunnel Corridor and Niles Canyon Corridor). The primary cause of the decline of the Alameda striped racer has been habitat fragmentation due to urban development and associated highway and road development. Fragmentation has led to suspected genetic isolation of most populations. Fire suppression and vegetative succession is another contributing factor in Alameda striped racer decline because these snakes require open areas maintained by periodic fires.

There are 27 CNDDB occurrences of Alameda striped racer within 5 miles of the BSA. The closest known occurrence is approximately 0.5-mile south of the BSA within oak woodland and scrub habitat; this occurrence is dated June 19, 2015. The BSA has small patches of shrubs but does not include scrub habitat and has few burrows or rock outcrops. However, there is scrub habitat approximately 0.4 miles south of the BSA with no movement barriers between and Alameda striped racer is not restricted to scrub and chaparral; observations of the species have been made up to four miles from coastal scrub and chaparral habitat. The oak woodland and grassland within the BSA may provide suitable habitat for this species due to the open canopy and known usage of these communities. Critical habitat for the species

overlaps with approximately 0.20-acre of the southern portion of the BSA (Figure 4.4-2). Therefore, Alameda striped racer has potential to occur within the BSA.

4.4.1.5 Critical Habitat or Essential Fish Habitat

There is 0.20 acre of final critical habitat for Alameda striped racer within the southern portion of the BSA (Figure 4.4-2). The critical habitat within the BSA is on the edge of a larger expanse of critical habitat, as depicted on the left inset map on Figure 4.4-2. The area of critical habitat is annual grassland lacking core habitat and refugia for Alameda striped racer, is not near core habitat for Alameda striped racer, and has disturbed sparsely vegetated soils in the location of an overhead utility line corridor. It is possible that Alameda striped racer moves through this area, but it is not considered a habitat area that provides essential life cycle needs of the species.

Based on the literature review, anadromous fish critical habitat for steelhead (California Central Coast Distinct Population Segment) and Essential Fish Habitat for coho and Chinook salmon may be present in the "Las Trampas, California" or "Walnut Creek, California" 7.5-minute quadrangles. However, there is no habitat for fish within the BSA because all aquatic resources within the BSA are either ephemeral or intermittent.

4.4.1.6 Wildlife Movement Corridors and Nursery Sites

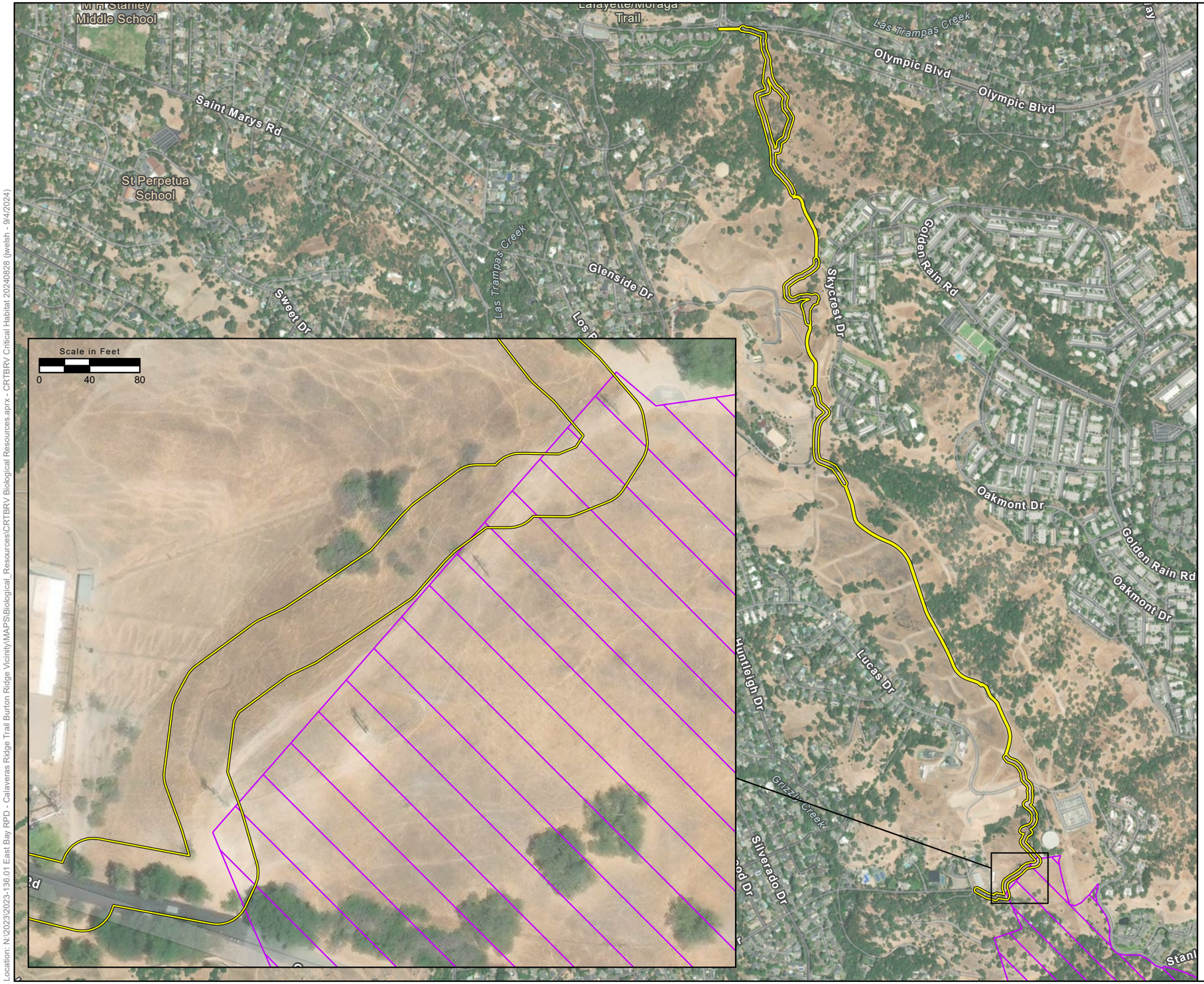
The BSA is a linear corridor within a larger minimally developed landscape that is surrounded by development to the north, east, and west, but is contiguous with a large expanse of minimally developed or undeveloped natural habitats to the south. The BSA is located within an Essential Habitat Connectivity area as depicted on the Essential Connectivity Areas map, which identifies larger, relatively natural habitat blocks that support native biodiversity and areas essential for connectivity between them. The BSA is likely used as a local movement corridor for wildlife, but is not expected to represent a regional movement corridor because it is surrounded by residential development on three sides.

For the purposes of this analysis, nursery sites include but are not limited to concentrations of nest or den sites such as heron rookeries or bat maternity roosts. These data are available through the CDFW's Biogeographic Information and Observation System database or as occurrence records in the CNDDB and are supplemented with the results of the field assessment. No nursery sites have been documented within the BSA. However, some oak trees within the BSA have hollows that may support bat maternity roosts, and the BSA provides potential fawning habitat for deer and nesting habitat for numerous bird species.

4.4.1.7 Protected Trees and Oak Woodlands

The BSA includes many trees that are protected per the Lafayette Municipal Code. These trees are mostly native species including Coast live oak, valley oak, and interior live oak, but there are also some California buckeye (*Aesculus californica*) and one arroyo willow (*Salix lasiolepis*). The BSA also includes some non-native and planted trees that may be protected per the Lafayette Municipal Code.

The BSA includes coast live oak woodlands, which are protected per the Oak Woodlands Conservation Act.



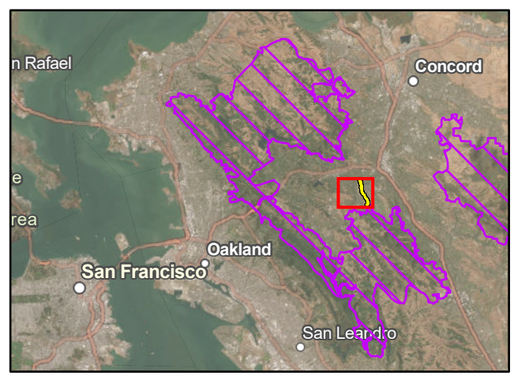
Map Contents

Biological Study Area - 10.50 ac.

Critical Habitat Type within BSA - 0.20 ac.

Alameda Whipsnake

Sources: ESRI, Maxar (2022), USFWS Critical Habitat (2015)



Location: N:\2023\2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity\MAPS\Biological_Resources\CRTBRV Biological Resources aprx - CRTBRV Critical Habitat 20240828 (jwelsh - 9/4/2024)

Map Date: 9/4/2024

ECORP Consulting, Inc.
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Scale in Feet
0
500
1,000

Figure 4.4-2. Critical Habitat

2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity

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4.4.2 Biological Resources (IV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Impact with Mitigation Incorporated

4.4.2.1 Special-Status Species

Multiple special-status species have potential to occur within the BSA and may be impacted by construction and operation of the Project. Impacts and mitigation for each species or group of species is provided in the following sections, and BMPs are recommended to minimize impacts to multiple special-status species, as referenced in their respective sections.

Plants

Special-status plants are presumed absent from the BSA at the present time based on results of the 2024 special-status plant survey. However, the presence of special-status plants may vary from year to year. There is the possibility that new populations of special-status plants could occur in the Project Area prior to construction, especially for the following plant species with suitable habitat within the BSA and multiple known occurrences near the BSA: bent-flowered fiddleneck, Mt. Diablo fairy-lantern, and Diablo helianthella. If special-status plant populations are present in or near the Project Area at the time of construction, Project direct impacts could include damage or loss of individual plants and Project indirect impacts could include conversion of suitable habitat, disturbance from human encroachment, and changes in habitat quality due to introduction or spread of non-native invasive plants, alteration of hydrology, erosion, and transport of soil, debris or pollutants into occupied habitat from the adjacent Project Area. Depending upon the species rarity, this may be considered a significant impact under CEQA.

A plant survey for the Project was completed on August 14, 2024. If Project construction occurs within 2 years of the plant survey completion date, no measures are expected to be needed. If plant surveys are not considered current at the time of Project construction, mitigation measure BIO-2 shall be implemented, which will minimize impacts to special-status plant species to less than significant.

Candidate Bumble Bees

The BSA includes suitable nesting, foraging, and overwintering habitat for Western bumble bee and Crotch's bumble bee. Project direct impacts may include injury or mortality to bumble bee adults and larvae due to damage of a nest during ground-disturbing activities. Project indirect effects include conversion of a small amount of suitable foraging habitat from grassland or oak woodland to trail.

Destruction of a nest is considered to be significant under CEQA. Impacts to foraging habitat would not be considered significant under CEQA, as there is an abundance of suitable foraging habitat available for use by these species within the larger region.

If the Western bumble bee or Crotch's bumble bee is still a candidate or formally listed species under the California ESA at the time construction occurs, mitigation measures BIO-3, shall be implemented, which will minimize impacts to candidate bumble bee species to less than significant.

California Red-Legged Frog

The BSA does not include aquatic breeding habitat for CRLF, but the oak woodland and grassland may provide suitable upland habitat. The Project would result in conversion of potential dispersal habitat from grassland or oak woodland to trail. This would represent a small amount of suitable habitat within a larger area of uniform habitat. Thus, conversion of upland dispersal habitat is not considered a significant impact.

CRLF could be directly impacted while in uplands during migration, dispersal, foraging, or seeking refuge habitat. Because CRLF occupy burrows or other subterranean refuges, these species may be crushed or trapped by operation of heavy equipment or other construction activities. Direct impacts to CRLF could occur during construction from injury or death through direct contact with construction equipment, construction materials, or vehicles.

Project indirect impacts include conversion of medium-quality potential dispersal habitat from grassland or oak woodland to trail. Impacts to suitable habitat would not be considered significant under CEQA, as there is an abundance of similar quality suitable habitat available for use by this species within the larger region.

BMP-9, BMP-12, BMP-13, BMP-14, BMP-15, BMP 17 and mitigation measure BIO-1 shall be implemented, which will minimize impacts to CRLF to less than significant.

Blainville's "Coast" Horned Lizard

The oak woodland and grassland is marginally suitable habitat for Blainville's horned lizard. Project direct impacts may include injury or mortality by vehicles or equipment during ground-disturbing activities, which may be considered significant under CEQA. Project indirect effects include conversion of a small amount of low-quality habitat. Impacts to suitable habitat would not be considered significant under CEQA, as there is an abundance of suitable habitat available for use by this species within the larger region.

BMP-12, BMP-13, BMP-14, BMP-15, BMP-16 and BMP-17 shall be implemented, which will minimize impacts to Blainsville's horned lizard to less than significant.

Alameda Striped Racer

The BSA does not include core habitat for Alameda striped racer; however, the oak woodland and grassland may provide suitable habitat. Approximately 0.20 acre of critical habitat of Alameda striped racer is within the BSA, and critical habitat within the Project Area may be impacted by the Project.

Project direct impacts may include injury or mortality by vehicles or equipment during ground-disturbing activities. Project indirect effects include conversion of a small amount of suitable habitat from grassland or woodland to trail. Impacts to suitable habitat would not be considered significant under CEQA, as there is an abundance of suitable habitat of similar quality available for use by this species within the larger region.

The critical habitat within the BSA lacks primary constituent elements. The District will discuss potential impacts to critical habitat with the USFWS.

BMP-9, BMP-11, BMP-12, BMP-13, BMP-14, BMP-15, BMP-17 and mitigation measure BIO-1 shall be implemented, which will avoid take and minimize potential impacts to Alameda striped racer to less than significant.

Nesting Birds (Including Raptors)

If Project-related activities occur during the nesting season, Project direct impacts may include removal of active nests or disruption of nesting activities could lead to "take" of a protected bird, or an active nest with eggs or young, which would be considered a significant impact under CEQA. Project indirect effects may include decreased reproductive success or abandonment of the area as nesting or foraging habitat due to construction-related noise, and conversion of a small amount of suitable habitat from grassland or woodland to trail. Impacts to suitable habitat would not be considered significant under CEQA, as there is an abundance of suitable habitat of similar quality available for use within the larger region.

Mitigation measure BIO-4 shall be implemented, which will minimize impacts to protected birds and active nests to less than significant.

Bats

The trees in the BSA represent potential roosting habitat for Townsend's big-eared bat and pallid bat and tree hollows may provide maternity roosting habitat for common and special-status bats. The Project does not propose to remove trees, but some trees may be trimmed, and grading may occur under the canopy of some trees.

Project direct impacts may include mortality or injury to bats in an occupied roosting site during tree trimming activities, especially if the activities occur during the maternity roosting season or in winter. Project indirect impacts may include disturbance to roosting bats from Project-related noise. Impacts to special-status bats and maternity roost sites are considered significant under CEQA.

Mitigation Measure BIO-5 shall be implemented, which will minimize impacts to bats to less than significant.

San Francisco Dusky-Footed Woodrat

The oak woodland within the BSA is marginally suitable potential habitat for San Francisco dusky-footed woodrat. Project direct effects may include injury, mortality, or nest abandonment if a nest site is within the Project Area, and temporarily displace foraging or transitory San Francisco dusky-footed woodrats during construction. Project indirect effects may include conversion of low-quality habitat from woodland

to trail. Impacts to suitable habitat or temporary displacement of foraging or transitory San Francisco dusky-footed woodrats would not be considered significant under CEQA, as there is an abundance of suitable habitat of similar quality available for use within the larger region. Injury, mortality, or nest abandonment may be considered a significant impact under CEQA.

BMP-12, BMP-13, BMP-14, BMP-15, BMP-16 and BMP-17 shall be implemented, which will minimize impacts to San Francisco dusky-footed woodrat to less than significant.

American Badger

The grassland within the BSA is potential foraging and denning habitat for American badger.

Project direct impacts may include injury, mortality, or natal den abandonment if a badger den occur in the Project Area, and temporarily displace foraging or transitory American badgers. Project indirect impacts may include conversion of medium-quality habitat from grassland or woodland to trail. Impacts to suitable habitat or temporary displacement of foraging or transitory American badgers would not be considered significant under CEQA, as there is an abundance of suitable habitat of similar quality available for use within the larger region. Injury, mortality, or natal den abandonment may be considered a significant impact under CEQA.

BMP-12, BMP- 13, BMP-14, BMP 15, BMP-16 and BMP-17 shall be implemented, which would minimize impacts to American badger to less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☒	☐

Less Than Significant Impact with Mitigation Incorporated

Sensitive natural communities are absent from the BSA. Thus, the Project will not impact sensitive natural communities. However, approximately 0.03 acre of riparian habitat is present in the BSA. Therefore, the Project shall implement BMP-12 to ensure that impacts remain at a less than significant level.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Impact with Mitigation Incorporated

The intermittent drainage would likely be considered Waters of the State, and must be "relatively permanent" and a tributary to a Traditional Navigable Water (TNW) to be considered a Water of the U.S. The CWA Section 404 jurisdictional status of the intermittent drainage would need to be determined through the U.S. Army Corps of Engineers (USACE) verification process. The Project Area is a significant distance away from the intermittent drainage. Therefore, the Project would not result in direct or indirect impacts to the intermittent drainage.

The ephemeral drainages would likely be considered Waters of the State, and may not be considered Waters of the U.S. because they are ephemeral and isolated waterbodies with no apparent continuous surface connection to a TNW. However, the appropriate resource agencies must make that determination. The southernmost ephemeral drainage is culverted and the Project proposes to align the new trail over the existing culvert. The Project proposes to construct a clear span bridge to avoid impacts to the bed and bank of the northernmost ephemeral drainage. Therefore, implementation of BMP-1, BMP-2, and mitigation measure BIO-6 shall be included to avoid significant impacts to Waters of the U.S. and/or State. With mitigation incorporated, impacts to protected wetlands shall be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Impact with Mitigation Incorporated

The Project may temporarily disturb and displace some wildlife within the BSA during construction. Once construction is complete, wildlife movements are expected to resume but increased presence of humans along the trail following construction may deter some wildlife from using the area during peak use hours. The constructed trail will likely be used by wildlife outside of peak human-use hours. Thus, the Project is not expected to substantially interfere with wildlife movement.

Nursery sites, such as bat maternity roosts, may be impacted by the Project if present within the Project Area during construction. Implementation of mitigation measures BIO-1 and BIO-5 would avoid or minimize impacts to nursery sites and any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated

The BSA includes many trees that are protected per the Lafayette Municipal Code. Therefore, the Project shall implement mitigation measure BIO-7, which would mitigate potential impacts to a less than significant level.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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

The BSA is not covered by any local, regional, or state conservation plans. Therefore, the Project would not conflict with any such plans and no impact would occur.

4.4.3 Mitigation Measures

BIO-1 **Disturbance Buffer.** If any special-status wildlife individuals (e.g., Alameda striped racer and CRLF) or nursery sites are observed during Project activities, all work will stop within a no-disturbance buffer of 100 feet around the individual or site unless the qualified biologist determines that a different sized buffer is appropriate to avoid disturbance, injury, or mortality. Project-related activities shall cease within the buffer until the animal leaves on its own or the nursery site is no longer active and the occurrence will be reported to the qualified biologist. The appropriate resource agencies (e.g., the USFWS and the CDFW) shall be contacted, if required.

BIO-2 **Special-Status Plant Surveys.** If special-status plant surveys for the Project are not current per the CDFW protocol (surveys are typically considered current if it is within 2-5 years of construction), a preconstruction special-status plant survey shall be conducted according to the CDFW, CNPS, and USFWS protocols.

Surveys shall be conducted throughout all suitable habitat within the Project Area (including all areas with Proposed Project ground-disturbing or vegetation-disturbing activities) and a 25-foot buffer to address potential direct and indirect impacts of the Project. Surveys shall be conducted by a qualified biologist and timed according to the identifiable period for special-status plant species with potential to occur (typically the blooming period). To the extent feasible, known reference populations will be visited prior to surveys to confirm target species are evident and identifiable at the time of the survey. If no special-status plants are found, no further measures pertaining to special-status plants are necessary.

If found and complete avoidance is not feasible, an impact assessment shall be conducted by a qualified biologist to determine whether Project-related activities would be significant such

that they would have the potential to eliminate, substantially reduce the number of, or restrict the range of the special-status plant species, and/or conflict with any local policies or ordinances protecting special-status plant species. If impacts are determined to be less than significant, no further measures are needed. Consultation with the appropriate agency (the CDFW, the USFWS and/or the CEQA Lead Agency) would occur for significant impacts to determine if additional avoidance and minimization measures are necessary.

BIO-3 **Candidate Bumble Bee Preconstruction Survey and Avoidance.** If the Crotch's bumble bee is still a candidate or formally listed species under the California ESA at the time construction occurs and if ground-disturbing activities are scheduled to begin between February 1 and October 31, candidate bumble bee preconstruction surveys shall be conducted by a qualified biologist. Based on CDFW's Survey Considerations for California ESA Candidate Bumble Bee Species, it is recommended that three candidate bumble bee surveys be conducted at two-to-four-week intervals during the colony active period (April-August), if possible. If a candidate bumble bee is detected, any remaining surveys will focus on nest detection. If an active candidate bumble bee nest is detected, an appropriate no disturbance buffer zone shall be established around the nest in coordination with CDFW. Nest avoidance buffers may be removed at the completion of the flight season (October 31) and/or once the qualified biologist deems the nesting colony is no longer active.

BIO-4 **Nesting Bird Avoidance or Preconstruction Survey.** To the extent feasible, Project activities shall be conducted outside of the bird nesting season (typically February 1–August 31, and as early as January 1 for raptors). If Project activities cannot happen outside of bird nesting season a preconstruction nesting bird survey shall be conducted by a qualified biologist within 14 days prior to the commencement of Project-related activities to identify active nests that could be impacted by construction. The preconstruction nesting bird survey shall include accessible areas within 100 feet of the Project boundaries, including any temporary disturbance areas. For raptors, the preconstruction nesting bird survey shall include accessible areas within 500 feet of the Project boundary. If active nests are found, a no-disturbance buffer shall be established around the nest. A qualified biologist, in consultation with the CDFW, shall establish a buffer distance. The buffer shall be maintained until the nestlings have fledged (e.g., are capable of flight and become independent of the nest), to be determined by a qualified biologist. The avoidance buffer can be removed and no further measures are necessary once the young have fledged or the nest is no longer occupied, as determined by a qualified biologist.

BIO-5 **Bat Avoidance.** Avoid tree removal or trimming of tree branches except for small branches and limbs containing no cavity, crevice or exfoliating bark within the Project Area. If construction activities using loud construction equipment (e.g., rotor hammer, compactor/roller, excavator) are avoided during the maternity season for special-status bats (April 1 through August 31), no mitigation is required. If construction activities using loud construction equipment (e.g., rotor hammer, compactor/roller, excavator) are scheduled to occur during the maternity season for special-status bats (April 1 through August 31), no

more than 14 days prior to use of this equipment, a qualified biologist will conduct preconstruction surveys for special-status bat roosts within 250 feet of the Project Area. If any occupied special-status bat roosts are located during preconstruction surveys, no work using loud construction equipment will be performed within a 250-foot buffer around the roosts during the period when the maternity roost is potentially active (April 1 through August 31).

BIO-6 **Regulatory Permits.** If needed, the Park District shall obtain permits to impact jurisdictional features from the USACE, RWQCB, and/or CDFW. These permits will include conditions and Best Management Practices that the District shall implement during construction. Through implementation of the measures, impacts to jurisdictional features will be less than significant. These permits may also specify mitigation, which the District shall provide as specified by the agencies.

BIO-7 **Tree Permit and Avoidance.** If needed, a Tree Removal Permit shall be secured prior to impacting trees protected under the Lafayette ordinance, and all Lafayette requirements for impacting protected trees shall be met, including tree replacement or in-lieu payment. Avoidance buffers for avoided protected trees shall be consistent with the Lafayette requirements, shall be clearly demarcated as needed prior to construction, and shall be maintained until the completion of construction. A qualified biologist shall be present if work must occur within the avoidance buffer to ensure avoided protected trees are not impacted by the work.

In addition to the mitigation measures above, the following Biological Resource BMPs have been applied to the Project as well:

BMP-1: **Temporary Fencing.** The EBRPD shall install construction barrier fencing (including sediment fencing and straw wattles) to prevent contaminants and debris from entering waterways. Before construction begins, EBRPD shall identify the locations for the barrier fencing and mark those locations with stakes or flagging.

BMP-2: **Equipment Contaminants.** EBRPD shall comply with applicable stormwater ordinances, stormwater management plans, and BMPs to prevent or minimize the potential release of equipment-related petroleum contaminants into surface waters and groundwater. Implementation of standard construction procedures and precautions for working with petroleum and construction chemicals would further ensure that the impacts related to chemical handling during Project construction would be minor.

Applicable ordinances would be the City of Lafayette Chapter 5-4 of the Municipal Code, which requires that all development projects within the City of Lafayette are prohibited to discharge non-stormwater discharge into the City's stormwater system, follow the Contra Costa Clean Water Program Stormwater C.3. Guidebook, and follow the BMP's listed in Section 5-409 of the Lafayette Municipal Code.

BMP-9: **Equipment Use and Conditions.** The following measures shall be incorporated into the Project construction specifications to reduce potential for vehicle collisions with wildlife:

- Operators of vehicles and equipment shall adhere to a maximum speed limit of 15 miles per hour for all vehicle movement on unpaved areas within the Project Area during construction. The windshield of any equipment or vehicle's windshield shall remain clear of dust or other material that may impact visibility.

BMP-10: **Non-Native Invasive Plant Species.** The following measures shall be incorporated into the Project construction specifications to reduce introduction and spread of non-native invasive plant species:

- Clothing, vehicles, and equipment (including shoes, equipment undercarriage and tires/tracks) should be cleaned prior to entering the Project Area and, if invasive plant species are known to occur within the Project Area, prior to entering an area of the Project-site that is free of invasive plants. Materials used for the Project, such as fill dirt or erosion control materials, should be from weed-free locations or certified weed free.

BMP-11: **Alameda Striped Racer Critical Habitat.** The following measures shall be incorporated into the Project construction specifications to minimize impacts to Alameda striped racer critical habitat:

- The District shall discuss potential impacts to Alameda striped racer critical habitat with the USFWS and shall implement any resulting additional BMPs.

BMP-12: **Biological Monitoring.** A qualified biologist or approved biological monitor will remain on-site during all initial grading, dirt work, or mechanical ground-disturbing activities in riparian areas or if rock outcroppings or scrub vegetation is removed. When the Project Area is staffed by the biological monitor, a qualified biologist will be available to be at the site within two hours, if needed. The qualified biologist/biological monitor will be given the authority to stop any work that may result in the harm of special-status species. The qualified biologist/biological monitor will be the contact for any employee or contractor who might inadvertently kill or injure a listed species or anyone who finds a dead, injured or entrapped individual.

BMP-13: **Worker Awareness Training Program.** Prior to construction, a qualified biologist/biological monitor will conduct a construction employee education program in reference to potential special-status species and sensitive habitats on site. At a minimum, the program will provide an overview of relevant permit/agreement requirements, a description of special-status species potentially present, sensitive habitats on or near the site, avoidance areas and avoidance measures to be implemented, and instruction on actions to take if wildlife species are observed. A list of employees who attend the training sessions will be maintained to be made available for review by the CDFW upon request. Contractor training will be

incorporated into construction contracts and will be a component of weekly Project meetings.

BMP-14: **Preconstruction Survey.** A District Representative will conduct a preconstruction survey for special-status species immediately prior to groundbreaking activities. If at any point, construction activities cease for more than seven consecutive days, an additional preconstruction survey will be conducted prior to the resumption of work.

BMP-15: **Daily Clearance Survey.** The qualified biologist or biological monitor will conduct a clearance survey prior to the start of each workday. This will include walking the Project Area, and checking under construction equipment, Project vehicles, and their tires to ensure no species are utilizing the equipment as temporary shelter.

BMP-16: **Wildlife Relocation.** All wildlife species within harm's way will be given the opportunity to leave the work area on their own. With the exception of species protected by state or federal endangered species act(s), wildlife species may be removed from the work area by the qualified biologist/biological monitor in accordance with the approved conditions. Any relocated wildlife species will be moved to a safe area that provides suitable habitat. The relocation of any wildlife species will be documented in the daily monitoring logs and a summary report will be provided to EBRPD should the relocation of any special-status species be required.

BMP-17: **Exclusion Fencing.** Throughout the Project Area, a qualified biologist will make the determination as to whether exclusion fencing is necessary or appropriate to prevent harm to special-status species.

BMP-18: **Refuse Management.** All trash and debris within the work area will be placed in containers with secure lids before the end of each workday in order to reduce the likelihood of predators being attracted to the site by discarded food wrappers and other rubbish that may be left on-site. Containers will be emptied as necessary to prevent trash overflow onto the site and all rubbish will be disposed of at an appropriate off-site location.

4.5 Cultural Resources

Rincon Consultants, Inc. (Rincon 2024) prepared a *Cultural Resources Assessment* for the Project, (*CONFIDENTIAL*). Only the findings and recommendations from the Rincon study that are applicable to the current Project configuration have been incorporated into this analysis.

4.5.1 Environmental Setting

The Project Area is located approximately 200 feet east of the Olympic Boulevard and Pleasant Hill Road roundabout, and includes easements of portions of surrounding parcels (Attachment 1, Figure 1 and Figure 2). Specifically, the Project encompasses portions of Section 33 of Township 1N, Range 2W on the Walnut Creek, California, and Section 9 of Township 1S, Range 2W on the Las Trampas Ridge, California United States Geological Survey (USGS) 7.5-minute topographic quadrangles.

4.5.1.1 Methods

Rincon completed background and archival research in May 2024. A variety of primary and secondary source materials were consulted. Sources included, but were not limited to, historical maps, aerial photographs, ethnographic records, and written histories of the area. The following sources were utilized to develop an understanding of the Project Area and its context:

- Historical aerial photographs accessed via NETR Online
- Historical USGS topographic maps
- Sanborn Fire Insurance Maps
- Bureau of Land Management General Land Office Plat Maps
- Ethnographic Records

EBRPD has an agreement with the California Historical Resources Information System (CHRIS), Northwest Information Center (NWIC), located at Sonoma State University, to receive records search results for areas within EBRPD territory, every six months. The NWIC is the official state repository for cultural resources records and reports for Contra Costa County. In April 2024, EBRPD received an updated records search package which included the Project Area. Additionally, on May 22, 2024, EBRPD received the results of a CHRIS records search for areas of the Project outside of EBRPD territory. EBRPD forwarded those results for review to Rincon on May 23, 2024. The purpose of the records search was to identify previously recorded cultural resources, as well as previously conducted cultural resources studies within the Project Area and a 0.5-mile radius surrounding it.

Rincon Archaeologists conducted a pedestrian survey across the Project Area on May 24, 2024. The survey was completed using 15 meter transects across the Project Area; specifically, the staging and laydown areas within the Project Area, and the proposed trail alignments, which included a 15-meter buffer along either side of the alignment.

Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic-period materials (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite unit and a georeferenced map of the Project Area. Site characteristics and survey conditions were documented using field records and a digital camera.

4.5.1.2 Findings

An archeological survey was conducted by Rincon, and no archaeological resources were identified during the survey.

The CHRIS records search and background research identified 17 cultural resources studies within a 0.5-mile radius of the Project Area. Of these studies, three include portions of the Project Area, covering approximately 10 percent of the Project Area, and one is adjacent. None of the previous studies identified resources within the Project Area.

The CHRIS records search did not identify any previously recorded resources within the Project Area. The CHRIS records search and background research identified four cultural resources within a 0.5-mile radius of the Project Area. One cultural resource, a segment of the Northern Sacramento Railway, is previously recorded adjacent to the Project Area but it is no longer extant.

4.5.2 Cultural Resources (V) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐

Less Than Significant Impact

As mentioned in Section 4.5.1.2 above, the records search did not identify any historic-period or pre-contact cultural resources within the Proposed Project Area besides for the Northern Sacramento Railway, which is no longer extant. Therefore, no Historic Properties under Section 106 of the National Historic Preservation Act (NHPA) or Historical Resources under CEQA will be impacted with implementation of the Proposed Project. Any impact will be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated

As mentioned above, the records search did not identify any historic-period or pre-contact cultural resources within the Proposed Project Area. Therefore, no Historic Properties under Section 106 of the NHPA or Historical Resources under CEQA will be impacted with implementation of the Proposed Project. However, there always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Therefore, with implementation of Mitigation Measure CUL-1, which outlines procedures in the event of unanticipated discoveries, any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

Less Than Significant Impact

There are no known burial or dedicated cemetery sites within the Project Area; however, as stated above in b) there always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources or human remains; therefore, with implementation of CUL-1, impacts to human remains will remain less than significant.

4.5.3 Mitigation Measures

CUL-1: **Unanticipated Discoveries.** There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction. Therefore, the following procedures shall be implemented:

- If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:
- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined by CEQA or a historic property under Section 106 NHPA, if applicable. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) that the treatment measures have been completed to their satisfaction.
- If the find represents a Native American or potentially Native American resource that does not include human remains, then he or she shall further notify [tribe]. The agencies shall consult with the tribes on a finding of eligibility and implement

appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Preservation in place is the preferred treatment, if feasible. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to their satisfaction.

If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the Contra Costa County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the Project (Section 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (Section 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

4.6 Energy

This IS/MND analyzes energy consumption due to the potential direct and indirect environmental impacts associated with the Project. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal) and emissions of pollutants during the construction phase. This impact analysis focuses on the sole source of energy that is relevant to the Proposed Project: the equipment-fuel necessary for Project construction. This section is based on the analysis and recommendations presented in the Energy Consumption Assessment Memorandum prepared for the proposed Calaveras Ridge Trail Project (Appendix D, ECORP 2024c).

4.6.1 Environmental Setting

4.6.1.1 Electricity Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with most of its electricity followed by renewables, large hydroelectric and nuclear. Pacific Gas and Electricity Company (PG&E) provides electricity and natural gas to Alameda County. It generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. PG&E provides natural gas and electricity to most of the northern two-thirds of California, from Bakersfield and Barstow to near the Oregon, Nevada, and Arizona State Line. It provides 5.2 million people with electricity and natural gas across 70,000 square miles. In 2022, approximately 40 percent of PG&E's electricity came from renewable resources including biopower, geothermal, small hydroelectric, solar, and wind power. Overall 95 percent of the company's delivered electricity comes from greenhouse gas emission-free sources, including renewables, nuclear, and hydropower (PG&E 2024).

The California Public Utilities Commission (CPUC) regulates PG&E. The CPUC has developed energy efficiency programs such as smart meters, low-income programs, distribution generation programs, self-generation incentive programs, and a California solar initiative. Additionally, the California Energy Commission (CEC) maintains a power plant database that describes all the operating power plants in the state by county.

4.6.1.2 Fuel Consumption

Vehicle fuel use is typically measured in gallons (e.g., of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh. CARB's Emission Factor Model (EMFAC) Emissions Inventory extracts emissions from EMFAC2021, software that provides emissions from on- and off-road mobile sources in California (CARB 2021). Total automotive fuel consumption in Contra Costa County from 2019 to 2023 is shown in Table 4.6-1. As shown, automotive consumption has decreased since 2019.

Table 4.6-1. Automotive Fuel Consumption in Contra Costa County from 2019 to 2023

Year	Fuel Consumption (gallons)
2023	409,240,802
2022	411,823,582
2021	412,337,999
2020	368,253,151
2019	422,078,340

Source: California Air Resources Board 2024

4.6.2 Regulatory Setting

4.6.2.1 State

Executive Order B-55-18

In September 2018 Governor Jerry Brown Signed Executive Order (EO) B-55-18, which establishes a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Carbon neutrality refers to achieving a net zero carbon dioxide emissions. This can be achieved by reducing or eliminating carbon emissions, balancing carbon emissions with carbon removal, or a combination of the two. This goal is in addition to existing statewide targets for greenhouse gas emission reduction. EO B-55-18 requires the CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Senate Bill 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law Senate Bill (SB) 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation by the state's utilities to those power plants that meet an emissions performance standard jointly established by the CEC and the CPUC.

The CEC has designed regulations that:

- Establish a standard for baseload generation owned by, or under long-term contract to, publicly owned utilities, of 1,100 pounds carbon dioxide per megawatt hour. This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of greenhouse gas.
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long term while meeting the State's standards for environmental impact.
- Establish a public process for determining the compliance of proposed investments with the Emissions Performance Standard (Perata, Chapter 598, Statutes of 2006).

Renewable Portfolio Standards

Established in 2002 under SB 1078 and accelerated by SB 107 (2006) and SB 2 (2011), California's Renewables Portfolio Standard (RPS) obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. Eligible renewable resources are defined in the 2013 RPS to include biodiesel; biomass; hydroelectric and small hydro (30 megawatts or less); Los Angeles Aqueduct hydro power plants; digester gas; fuel cells; geothermal; landfill gas; municipal solid waste; ocean thermal, ocean wave, and tidal current technologies; renewable derived biogas; multi-fuel facilities using renewable fuels; solar photovoltaic;

solar thermal electric; wind; and other renewables that may be defined later. Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 60 percent of the total electricity sold to retail customers in California per year by December 31, 2030. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the California Independent Service Operator (CAISO) into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the CAISO to those markets, pursuant to a specified process. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

4.6.3 Energy (VI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	☐	☐	☒	☐

Less Than Significant Impact

The Project is proposing the construction and operation of a public trail in the City of Lafayette, totaling 2.5 miles. The proposed trail would interconnect with the existing trail accessible from the Moraga Trail and Olympic Boulevard then continuing south to Oak Canyon Road.

For the purposes of this analysis, the amount of fuel necessary for Project construction is calculated and compared to that consumed in Contra Costa County (see Table 4.6-2). Energy consumption associated with the Proposed Project is summarized in Table 4.6-2.

Table 4.6-2. Proposed Fuel Consumption

Energy Type	Annual Fuel Consumed	Percentage Increase Countywide
Project Construction Calendar Year One	14,975 gallons	0.003

Source: ECORP Consulting, Inc. using ratios provided in the Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1 (2016). See Appendix C.
Notes: The project increase construction-related fuel consumption is compared with the countywide fuel consumption in 2023, the most recent full year of data.

Fuel necessary for Project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the Project Area. The fuel expenditure necessary to construct the public trail would be temporary, lasting only as long as Project construction. As indicated in Table 4.6-2, the Project's gasoline fuel consumption during the one-time construction period is estimated to be 14,975 gallons, which would increase the annual countywide gasoline fuel use in the county by 0.003 percent. As such, Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction.

Operations of the Project would not generate any fuel consumption beyond existing conditions as it would not be contributing to any mobile sources beyond that already instigated by the regional trail. The Proposed Project includes the construction of a new trail, which would not contribute to a substantial increase in operational consumption.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

No Impact

The Project proposes an expansion of a regional trail system in order to enhance recreational opportunities by connecting and improving an existing trail network. It does not conflict with or obstruct a plan for renewable energy or energy efficiency.

4.6.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.7 Geology and Soils

4.7.1 Environmental Setting

4.7.1.1 Geology

The City of Lafayette, where the majority of the Proposed Project is located, is within the Coast Ranges geomorphic province, which is in the East Bay Region of the San Francisco Bay Area, approximately 9 miles east of the San Franscico Bay. The Coast Ranges are a series of northeast-trending mountain ranges

and valleys that run along the Pacific coast from Santa Barbara to the Oregon border, subparallel to the San Andreas Fault Zone. The City of Lafayette is separated from Berkeley and Oakland by the Berkeley Hills to the west, and is bordered to the north by the Black Hills; the Diablo Foothills Regional Park and Mount Diablo is approximately 5 miles west, with the Las Trampas Regional Wilderness Park and Las Trampas Peak approximately 5 miles to the southwest.

Geologic mapping by Dibblee and Minch (2005) indicates that the surficial geology within the Project Area is composed of Pliocene to late Miocene-age Orinda Formation (Tor), Miocene-age Briones Sandstone (Tbr), and Monterey Formation (Tmc and Tms).

Orinda Formation

The Orinda Formation dates to the Pliocene (2.4 million to 5.3 million years before present) and late Miocene (5.3 million to 23 million years before present) and consists of interbedded bluish and greenish-gray conglomerate, sandstone, siltstone, and grayish-red claystone (Dibblee, T.W. and Minch, J.A. 2005 and 1995). The Orinda Formation has produced significant fossil finds including a plastron, carapace, and eggshell from a turtle, as well as horse and rodent remains. The closest of these localities, based on the University of California Museum of Paleontology (UCMP) records, is approximately 4.7 miles southwest of the City of Lafayette, which were discovered during the construction of the Caldecott Tunnel (City of Lafayette 2022).

Briones Sandstone

The Briones Sandstone outcrops to the north, northeast, and northwest of the planning area. The Briones Sandstone dates to the late Miocene and consists of a medium grained, arkosic marine sandstone known to preserve fossils (Dibblee, T.W. and Minch, J.A. 2005 and 1995). Fossils from the Briones Sandstone include invertebrates such as echinoderms and mollusks as well as vertebrates such as *Desmostylus*, an extinct marine mammal somewhat similar to a hippopotamus. The closest fossil locality known to the UCMP was discovered near the San Pablo Dam. The Briones Sandstone has high paleontological sensitivity (City of Lafayette 2022).

Monterey Formation

The Monterey Formation outcrops to the north, northeast, and northwest of the planning area. The Monterey Formation dates to the late- to middle-Miocene (between 13 and 5 million years before present) and generally consists of fine- to medium-grained, arkosic sandstone, clayey shale, and siltstone (Dibblee, T.W. and Minch, J.A. 2005 and 1995).

4.7.1.2 Regional Seismicity and Fault Zones

An "active fault," or a Holocene-active, according to California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered "inactive", or pre-Holocene. The Southampton Fault, which is a pre-Holocene fault, is located right at the Proposed Project Area. Active faults within the area include the Calaveras Fault, approximately 2.75 miles

east of the Project Area, the Concord Fault, approximately 3.75 miles northeast of the Project Site, and the Hayward Fault, approximately 9.0 miles west of the Project Area (California Geological Survey [CGS] 2024a).

4.7.1.3 Surface Fault Rupture

The State Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) prohibits the development of structures for human occupancy across active fault traces. Under this Act, the CGS has established "Zones of Required Investigation" on either side of an active fault that delimits areas susceptible to surface fault rupture. The zones are referred to as Earthquake Fault Zones and are shown on official maps published by the CGS. Surface rupture occurs when the ground surface is broken due to a fault movement during an earthquake; typically, these types of hazards occur within 50 feet of an active fault (CGS 2024b).

The Southampton Fault, which passes through the Proposed Project Area, is not an active fault. As mentioned above, the closest active faults are the Concord Fault, the Hayward Faults, and Calaveras Fault.

4.7.1.4 Seismic Ground Shaking

Ground shaking occurs due to a seismic event and can cause extensive damage to life and property, and may impact areas hundreds of miles away from the earthquake's epicenter. The extent of the damage varies by event and is determined by several factors, including (but not limited to) magnitude and depth of the earthquake, distance from epicenter, duration and intensity of the shaking, underlying soil and rock types, and the integrity of structures.

The entire San Franscisco Bay Area, including the City of Lafayette and City of Walnut Creek, could be subject to strong ground shaking during earthquakes. According to the USGS ShakeMap that corresponds with the earthquake planning scenario generated by the USGS, if a large earthquake were to occur on either of the active faults in the region, the area could experience strong to very strong seismic ground shaking (USGS 2024a).

4.7.1.5 Liquefaction and Lateral Spreading

Liquefaction is a phenomenon in which unconsolidated, water saturated sediments become unstable due to the effects of strong seismic shaking. During an earthquake, these sediments can behave like a liquid, potentially causing severe damage to overlying structures. Lateral spreading is a variety of minor landslide that occurs when unconsolidated liquefiable material breaks and spreads due to the effects of gravity, usually down gentle slopes. Liquefaction-induced lateral spreading is defined as the finite, lateral displacement of gently sloping ground as a result of pore-pressure buildup or liquefaction in a shallow underlying deposit during an earthquake. The occurrence of this phenomenon is dependent on many complex factors, including the intensity and duration of ground shaking, particle-size distribution, and density of the soil.

The potential damaging effects of liquefaction include differential settlement, loss of ground support for foundations, ground cracking, heaving and cracking of structure slabs due to sand boiling, and buckling of deep foundations due to ground settlement. Dynamic settlement (i.e., pronounced consolidation and

settlement from seismic shaking) may also occur in loose, dry sands above the water table, resulting in settlement of and possible damage to overlying structures. In general, a relatively high potential for liquefaction exists in loose, sandy soils that are within 50 feet of the ground surface and are saturated (below the groundwater table). Lateral spreading can move blocks of soil, placing strain on buried pipelines that can lead to leaks or pipe failure.

The Liquefaction Potential Map within the City of Lafayette General Plan identifies the Project Area as having virtually no liquefaction potential (City of Lafayette 2002). Additionally, according to CGS Seismic Hazards Program: Liquefaction Zones, the Proposed Project location is not within liquefaction zone (CGS 2022).

4.7.1.6 Landslides

Landslides are one of the various types of downslope movements in which rock, soil, and other debris are displaced due to the effects of gravity. The potential for material to detach and move down slope depends on multiple factors including the type of material, water content, and steepness of terrain. Generally, earthquake-induced landslides occur within deposits of a moderate to high landslide potential when ground shaking triggers slope failures during or as a result of a nearby earthquake.

According to the U.S. Landslide Inventory managed by USGS, there is evidence of landslides within the Project Area (USGS 2024b). Additionally, according to the City of Lafayette's General Plan, portions of the new trail alignment are between "Areas of few or no slides and ground occasionally susceptible to sliding" and "areas of known slides and ground highly susceptible to sliding" (City of Lafayette 2002).

4.7.1.7 Soils

According to the Web Soil Survey (NRCS 2024), four soil units, or types, have been mapped within the Study Area and are shown on Table 4.7-1. Figure 4.7-1 shows the soil survey mapping for the Project Area.

Table 4.7-1. Soil Series Mapped in the Project Area

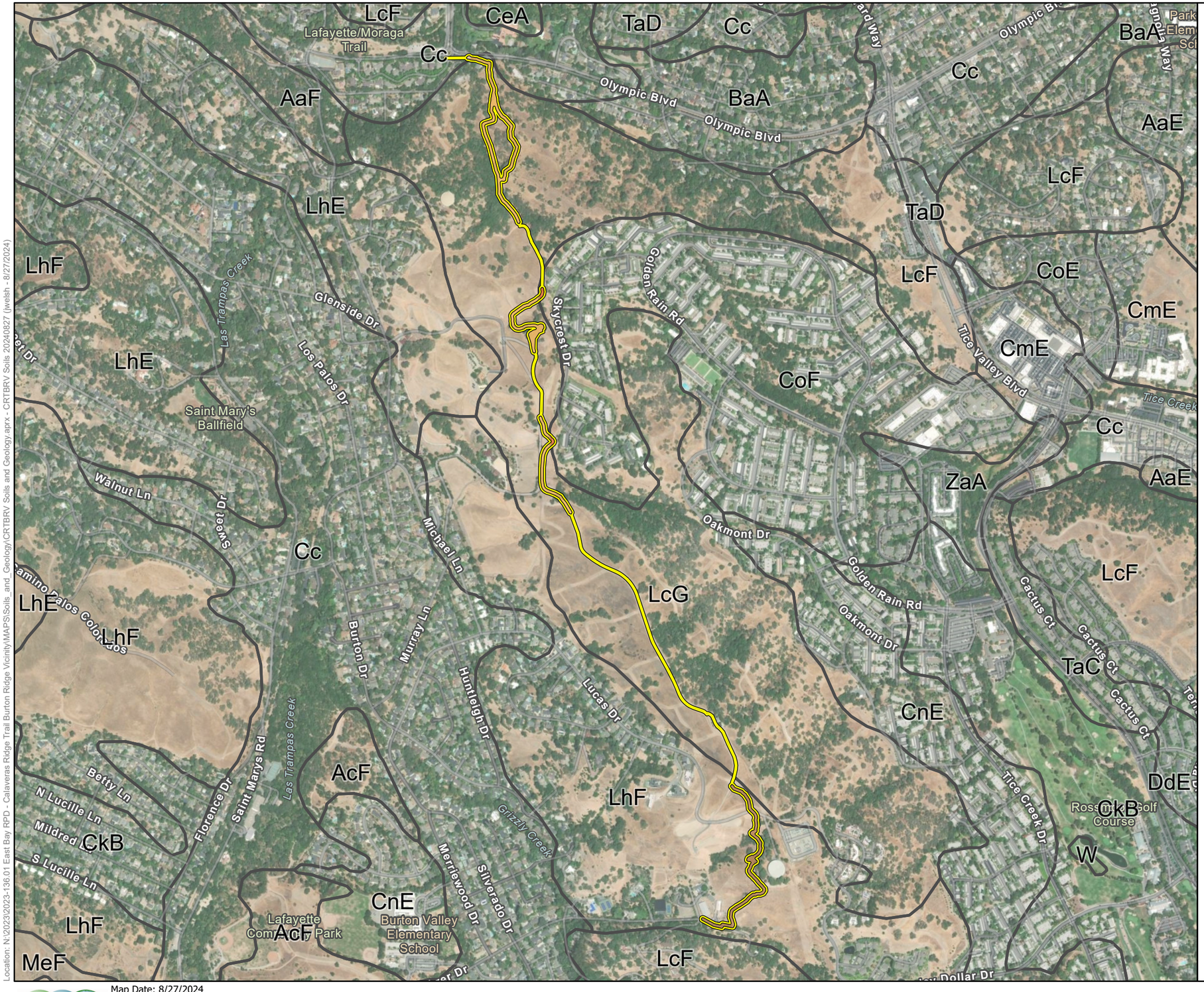
Map unit symbol	Map unit name	Key Features	Hydric Soil Rating
Cc	Clear Lake clay, 0 to 15 percent slopes, MLRA 15	clayey alluvium derived from metamorphic and sedimentary rock	Yes (Pescadero and unnamed minor components)
CoF	Cut and fill land-Millsholm complex, 30 to 50 percent slopes	residuum weathered from sandstone and shale	No
LcG	Lodo clay loam, 50 to 75 percent slopes, very rocky, MLRA 15	Residuum weathered from sandstone and shale	No
LhF	Los Osos clay loam, 30 to 50 percent slopes	Residuum weathered from sandstone and shale	No

Notes: MLRA = Major Land Resource Area

4.7.2 Regulatory Setting

4.7.2.1 Public Resources Code Section 5097.5 and Section 30244

State requirements for management of paleontological resources are included in Public Resources Code (PRC) Section 5097.5 and Section 30244. These statutes prohibit the removal of any paleontological site or feature from public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts on paleontological resources from developments on public (state, county, city, district) lands.



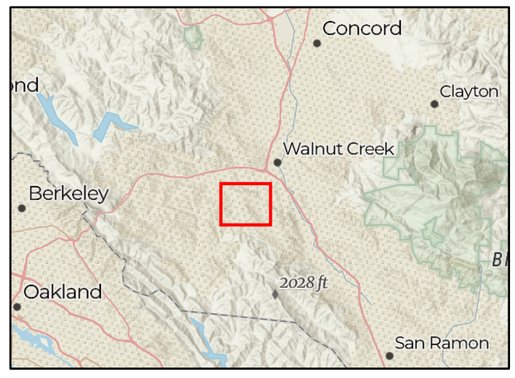
Map Contents

Biological Study Area - 10.50 ac.

NRCS Soil Types

- Cc - Clear Lake clay, 0 to 15 percent slopes, MLRA 15
- CoF - Cut and fill land-Millsholm complex, 30 to 50 percent slopes
- LcG - Lodo clay loam, 50 to 75 percent slopes, very rocky, MLRA 15
- LhF - Los Osos clay loam, 30 to 50 percent slopes, MLRA 15

Sources: ESRI, Maxar (2022), USDA NRCS SSURGO (2019)



Location: N:\2023\2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity\MAPS\Soils_and_Geology\CRTBRV Soils and Geology.aprx - CRTBRV Soils 20240827 (jwelsh - 8/27/2024)

Map Date: 8/27/2024

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 500 1,000

Figure 4.7-1. Natural Resources Conservation Service Soils
2023-136.01 East Bay RPD - Calaveras Ridge Trail Burton Ridge Vicinity

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4.7.2.2 Lafayette General Plan

The Lafayette General Plan is a comprehensive long-range general plan for the physical development of the City of Lafayette (City of Lafayette 2002). The various elements within the General Plan include goals and policies for the physical development of the City. Goals and policies related to Geology and Paleontology are listed below:

Goal OS-6: Improve water quality in watercourses.

Policy OS-6.1: Reduce Watercourse Pollution. Minimize pollutants in storm water runoff.

Goal OS-7: Protect and preserve soil as a natural resource.

Policy OS-7.1: Control Soil Erosion. Control soil erosion to prevent flooding and landslides, maintain water quality, and reduce public costs to flood control and watercourse maintenance.

4.7.2.3 Walnut Creek General Plan

The Walnut Creek General Plan is a comprehensive long-range general plan for the physical development of the City of Lafayette (City of Walnut Creek 2006). The various elements within the General Plan include goals and policies for the physical development of the City. Goals and policies related to Geology and Paleontology are listed below:

Goal 1: Protect life and property from geologic hazards.

Policy 1.1: Reduce the potential effects of seismic and other geologic hazards, including slope instability.

4.7.3 Geology and Soils (VII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause 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?	☐	☐	☒	☐

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐

Less Than Significant Impact

i and ii) There are active faults in the vicinity of the Project Area that are susceptible to rupture and have historically created strong seismic ground shaking within the area. However, an impact is only considered significant if the Project would increase existing seismic hazards by increasing severity or likelihood of the hazards impacting people above the already existing conditions.

The potential for damage due to ground shaking would be minimized by proper design as the Proposed Project involves construction of a trail and will have minimal structural elements as only one clear span bridge is proposed across the existing ephemeral drainage that the trail will cross. The bridge would be required to comply with applicable California Building Code standards (California Code of Regulations, Title 24), which includes standards for various aspects of construction, including but not limited to earthwork, embankment construction, foundation investigations, residence to ground shaking in various zones of the state, and soil strength. Implementation of the Proposed Project would not cause an increased risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, or seismic related ground failure. Therefore, a less than significant impact would occur and no mitigation is required.

iii) Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs as a consequence of cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements and differential settlements. There are no areas of liquefaction mapped within the Project Area and no structures planned for the Project Area. Therefore, a less than significant impact would occur, and no mitigation is required.

iv) Steep slopes, in conjunction with certain soil types, can be prone to soil erosion and landslides. Landslides occur as a result of topographical and soil conditions, where loose soils move down steep slopes. Some of the natural causes of this instability are earthquakes, weak soils, erosion, and heavy rainfall. Human activities such as poor grading that undercuts steep slopes or overloads them with fill, excessive irrigation, and removal of vegetation can also contribute to ground failure.

As described above, the Proposed Project is within an area that is susceptible to landslides. During rainfall events or earthquakes, there could be an increased potential for landslides. The Proposed Project would involve earthwork and mechanical equipment where available, but also utilizing hand crews. The installation of the clear span bridge would occur in a low lying area to cross the drainage, where the risk

of landslide is low. However, the trail has been designed to follow the contours of the existing topography, and any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Less Than Significant Impact

The Proposed Project does include ground disturbing activities including grading and clear span bridge installation. Access and staging near water features may result in erosion from the streambanks or sediment loading into the channel. However, with implementation of BMP-1, which would require temporary fencing to ensure that debris does not enter waterways, and BMP-3, which includes erosion control measures, any impacts to erosion or the loss of topsoil would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

Less Than Significant Impact

As described above, the Proposed Project is within an area that is susceptible to landslides. During rainfall events or earthquakes, there could be an increase in potential for landslides. The Proposed Project would involve earthwork and mechanical equipment where available, but will also utilize hand crews. The installation of the clear span bridge would occur in a low lying area to cross the drainage, where the risk of landslide is low. However, the Project does not involve the construction of any structures that would be susceptible to collapse in the event of a seismic event. Therefore, any impacts would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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

Expansive soils are those soils that have high clay content that swell when wet and shrink when dry. The Proposed Project does have Clear Lake clay, which is a clayey alluvium derived from metamorphic and sedimentary rock. These soils are characterized as "poorly drained," which means that they do not allow water to percolate through them and are considered expansive soils. Expansive soils are susceptible to shrinking and swelling during rain events, which can cause building foundations to crack, potentially resulting in building or structural failure. However, the Project does not involve the construction of any structures and would not create a direct or indirect risk to life and property. Therefore, any impacts would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

No Impact

The Proposed Project would not result in the generation of wastewater. It would also not involve the construction or modification of any septic tanks or alternative wastewater disposal systems. Therefore, the Proposed Project would have no impact associated with the placement of such systems on unsuitable soil.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Less Than Significant With Mitigation Incorporated

Based on a paleontological record search performed by Sierra College Natural History Museum, there are no known unique paleontological or geologic resources existing within the Project Area. The discovery of unknown paleontological resources during construction is a potentially significant impact. With implementation of Mitigation Measure PALEO-1, this impact would be reduced to a less than significant level.

4.7.4 Mitigation Measures

PALEO-1: **Discovery of Unknown Resources.** If any paleontological resources (i.e., fossils) are found during Project construction, construction shall be halted immediately in the subject area and the area shall be isolated using orange or yellow fencing until EBRPD is notified and the area

is cleared for future work. A qualified paleontologist shall be retained to evaluate the find and recommend appropriate treatment of the inadvertently discovered paleontological resources. If EBRPD resumes work in a location where paleontological remains have been discovered and cleared, EBRPD will have a paleontologist onsite to confirm that no additional paleontological resources are in the area.

4.8 Greenhouse Gas Emissions

This section is based on the analysis and recommendations presented in the Emissions Assessment Memorandum prepared for the proposed Calaveras Ridge Trail Project (Appendix A, ECORP 2024a).

4.8.1 Environmental Setting

GHG emissions are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps more than 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

The local air quality agency regulating the SFBAAB, including the Project Area, is the BAAQMD, the regional air pollution control officer for the basin. The BAAQMD approved the BAAQMD 2022 CEQA Guidelines. These guidelines present a project-level operational threshold of significance for GHG emissions based on adherence to a suite of BAAQMD performance standards for land uses projects directly related to building design, transportation and consistency with the CEQA Guidelines Section 15183.5(b) or compliance with a Qualified GHG Reduction Strategy. BAAQMD has developed the BAAQMD performance standards for land uses projects based on typical residential and commercial land use projects and typical long-term communitywide planning documents such as general plans and similar long-range development plans. According to the BAAQMD, these performance standards may not be appropriate for other types of projects that do not fit into the mold of a typical residential or commercial project or general plan update (BAAQMD 2023). The BAAQMD states that lead agencies should keep this point in mind when evaluating other types of projects (BAAQMD 2023). Additionally, the BAAQMD performance standards are intended for new land use development projects to achieve California's long-term climate goal of carbon neutrality by 2045. The Proposed Project is not a typical residential or commercial project and does not involve a new land use. Therefore, the BAAQMD performance standards

for land uses projects based on typical new residential and new commercial land use projects are not appropriate for use in this analysis.

For the purposes of this analysis, Project GHG emissions are quantified and compared to the thresholds issued by the California Air Pollution Control Officers Association (CAPCOA), which is an association of air pollution control officers representing all 35 local air quality agencies across California, including the BAAQMD. CAPCOA has instituted a GHG significance threshold of 900 metric tons of CO_2e annually for the evaluation of proposed land use development projects. This threshold, indicating a 90 percent capture rate, encompasses projects representing approximately 90 percent of GHG emissions from new sources. The 900 metric tons of CO_2e per year threshold is typically utilized to classify small projects within California as inconsequential, as it accounts for less than one percent of the future 2050 statewide GHG emissions target. CAPCOA considers the 900 metric ton threshold sufficiently low to capture a significant portion of future residential and nonresidential development necessary for accommodating statewide population and economic growth. Simultaneously, it establishes the emission threshold at a level that excludes small projects contributing a relatively minor fraction of cumulative statewide GHG emissions. The Project is compared to the CAPCOA significance threshold of 900 metric tons annually.

4.8.2 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Less Than Significant Impact

GHG Emissions were modeled using CalEEMod, version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod provides the ability to analyze a project based on California emission standards. Project construction generated GHG emissions were calculated using CalEEMod model defaults for Contra Costa County and the anticipated construction equipment identified by the East Bay Parks District. As the Project proposes the construction of 2.5- miles of new trail, 0.7 miles of 54-inch tall equestrian style fencing, approximately 10 access gates, and a small footbridge as well as excavation and grading activities, as stated in the Project Description, the disturbed area was conservatively modeled as 7.27 acres. Additionally, the export of 10,000 cubic yards of soil from the Project Area was accounted for. It is noted that the CalEEMod model cannot specifically account for the construction of a park trail due to the limited land uses available within the model and therefore such activity is modeled as a non-asphalt surface in the CalEEMod Model. Because the Project proposes constructing a new trail within an existing trail network, operational GHG emissions are discussed qualitatively.

4.8.2.1 Construction-Related GHG Emissions

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Area, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 4.8-1 illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 4.8-1. Construction-Related Greenhouse Gas Emissions

Emission Source	CO_2e (Metric Tons/Year)
Construction Calendar Year One	152
CAPCOA Significance Threshold	*900*
Exceed Significant Impact Threshold?	**No**

Source: California Emissions Estimator Model (CalEEMod) version 2022.1.1. Refer to Appendix A for Model Data Outputs.
Notes: Emission calculations account for the conservative estimate of 4.48 acres of trail being constructed and the export of 10,000 cubic yards of soil.
CAPCOA = California Air Pollution Control Officers Association; CO_2e = Carbon Dioxide Equivalent

As shown in Table 4.8-1, Project construction would result in the generation of 152 metric tons of CO_2e during the first calendar year of construction and 70 metric tons of CO_2e during the second calendar year of construction. Both years are below the CAPCOA significance threshold of 900 metric tons of CO_2e. Once construction is complete, the generation of these GHG emissions would cease. Furthermore, GHG emissions generated by the construction sector have been declining in recent years. For instance, construction equipment engine efficiency has continued to improve year after year. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower (hp) and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the USEPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis-Con, and Yanmar). On August 27, 1998, the USEPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 hp and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. As a result, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards. Tier 3 engine standards reduce precursor and subset GHG emissions such as nitrogen oxide by as much as 60 percent. On May 11, 2004, the USEPA signed the final rule introducing Tier 4 emission standards, which were phased in over the period of 2008-2015. The Tier 4 standards require that emissions of nitrogen oxide be further reduced by about 90 percent. All off-road, diesel-fueled construction equipment manufactured in 2015 or later will be manufactured to Tier 4 standards.

In addition, the California Energy Commission recently released the 2019 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code). Both the 2016 and 2019 updates to the Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions, and alterations to existing buildings. For instance, effective January 1, 2017, owners/builders of construction projects have been required to divert (recycle) 65 percent of construction waste materials generated during the Project construction phase. This requirement greatly reduces the generation of GHG emissions by reducing decomposition at landfills, which is a source of CH_4, and reducing demand for natural resources.

This impact is less than significant.

4.8.2.2 Operational GHG Emissions

The Project is proposing the construction of a new 1.2-mile regional trail on undeveloped land and a new 1.3-mile regional trail within an existing roadway, totaling 2.5-miles. This expansion would connect and enhance the existing trail network. Beyond current conditions, the Project would contribute a minimal amount of operational GHG emissions from new mobile vehicle trips to the Project Area and the use of equipment for trail maintenance. Thus, the increases in any GHG emissions associated with Project operations would not be substantial and would not exceed the CAPCOA significance threshold of 900 metric tons of CO_2e during operations. Therefore, this impact is less than significant.

For these reasons, the Proposed Project's construction GHG emissions would have a less than a significant impact.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

No Impact

California promulgates several mandates and goals to reduce statewide GHG emissions, including SB 32 which aims to reduce statewide GHG emissions to 40 percent below 1990 levels by the year 2030 and 80 percent below 1990 levels by the year 2050 (Executive Order S-3-05). The Proposed Project is subject to compliance with SB 32. As discussed previously, the Proposed Project-generated GHG emissions would not surpass the CAPCOA GHG significance threshold, which was developed in consideration of statewide GHG reduction goals. The Project would not conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing GHG emissions.

For these reasons, the Project would not conflict with any applicable plan, policy, or regulation related to the reduction in GHG emissions. There is no impact.

4.8.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

4.9.1.1 Hazardous Materials Sites

As defined in Title 22 of the CCR, Division 4.5, Chapter 11, Article 3, hazardous materials are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are commonly used in commercial, agricultural, and industrial applications, as well as residential uses to a limited extent.

Hazardous wastes are any hazardous materials that are discarded, abandoned, or are to be recycled. If improperly handled, hazardous materials and wastes can result in public health hazards if released to the soil or groundwater through airborne releases in vapors, fumes, or dust.

In California, the USEPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (Cal EPA). Cal EPA's Department of Toxic Substances Control (DTSC) and the RWQCBs signed a Memorandum of Agreement (MOA) in March 2005 aimed to avoid duplication of efforts among the agencies involved in the regulatory oversight of investigation and cleanup of hazardous wastes. Under the MOA, either DTSC or the RWQCB is assigned to be the oversight agency at the beginning of the investigation and cleanup process.

According to the DTSC EnviroStor database, the nearest hazardous material cleanup site is approximately 1.4 miles west of the Project Area (DTSC 2024), at the Lafayette Elementary School. This site has been certified as of May 6, 2021. The RWQCBs GeoTracker database showed that there are not any hazardous Leaky Underground Storage Tank cleanup sites within the Proposed Project Area. The closest is approximately 0.75 miles away, at the Golden Gate Service Station at 1601 Tice Valley Boulevard in Walnut Creek. The status of this clean-up site is closed as of April 29, 1998.

4.9.1.2 Airports

The nearest public use airport located to the Proposed Project is Buchanan Field Airport, located at 550 Sally Ride Drive in Concord, California, approximately 7 miles north.

4.9.1.3 Emergency Response and Evacuation Plans

The City of Lafayette has an Emergency Operations Plan that would be implemented in the event of a disaster or emergency (City of Lafayette 2018). SR-24 is identified as a main arterial. In addition, the Lafayette Police Department at 3675 Mount Diablo Boulevard is identified as an emergency operations center. SR-24 passes east-west through the City; the police department is located north of the Proposed Project location.

The City of Lafayette also has an Emergency Operations Plan/Wildland Fire Evacuation Plan, which would be implemented in the event of a wildland fire or other large emergency (City of Lafayette 2018). The plan defines command and control based on the standardized Incident Command System, establishes communication protocols, identifies staging areas and evacuation routes, and defines evacuation triggers and emergency response to those triggers. The plan breaks up the City into 17 zones, and describes each zone within the context of emergency response and known hazards, and identifies special concerns within each zone. The plan identifies evacuation routes and collection areas within each zone, and notes which routes must remain unblocked and open to ensure clear routes of travel during an emergency.

4.9.1.4 Schools

The closest school, Burton Valley Elementary School, is located approximately 0.53 miles east of the southern portion of the proposed trail segments.

4.9.2 Regulatory Framework

4.9.2.1 County Hazardous Waste Task Force

Contra Costa County contains some heavy industrial development that may be associated with hazardous waste transport across the County, and in particular, Lafayette (City of Lafayette 2017). Hazardous uses located in Lafayette include natural gas and petroleum product pipelines that run through or near the City. Some of these pipelines may cross unstable slopes and areas underlain by soft mud and peat. The hazard of petroleum fires is considered more dangerous than natural gas fires as they are more likely to spread to nearby property. In 1983, Contra Costa County formed the County Hazardous Waste Task Force to appropriately manage the transport and disposal of hazardous waste. The County Hazardous Waste Management Plan is a comprehensive analysis of all waste management from generation through disposal. The County's General Plan also includes policies to support its goal of protecting citizens from such hazards. Those most relevant to the Proposed Project strictly regulates the storage and transport of any hazardous materials that may occur.

4.9.2.2 Unified Hazardous Waste and Hazardous Materials Management Regulatory Program

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program), codified in California Health and Safety Code Sections 25404 et seq., requires the administrative consolidation of six hazardous materials and waste programs under one agency, a Certified Unified Program Agency (CUPA). The following programs are consolidated under the unified program:

- Hazardous Materials Release Response Plans, and Inventory (also referred to as Hazardous Materials Business Plans)
- California Accidental Release Program
- Underground Storage Tanks

- Aboveground Petroleum Storage Spill Prevention Control and Countermeasures
- Hazardous Waste Generation and Onsite Treatment
- Uniform Fire Code Plans and Inventory Requirements

The State Secretary for Environmental Protection designated the Contra Costa Health Services, Hazardous Materials Programs, Division of Health Services Department as the local CUPA. The CUPA is charged with the responsibility of conducting compliance inspections of over hazardous materials facilities in Contra Costa County. These facilities and businesses handle hazardous materials, generate or treat a hazardous waste, and/or operate underground storage tanks. The CUPA uses education and enforcement to minimize the risk of chemical exposure to human health and the environment. The CUPA forwards important facility information to local fire prevention agencies that enables them to take appropriate protective action in the event of an emergency at regulated facilities. In order to legally store and use hazardous materials above the trigger quantities, users must apply for permits and demonstrate satisfactory compliance with regulations.

4.9.2.3 Lafayette General Plan

The Lafayette General Plan is a comprehensive long-range general plan for the physical development of the City of Lafayette, which includes the current City of Lafayette Safety Element, which was adopted in 2002 and amended in 2023 (City of Lafayette 2023a). Goals and policies related to Hazards and Hazardous Materials are in Chapter VI, Safety, and are listed below.

Goal S-5: Reduce the hazards of the storage, transportation, and disposal of hazardous materials.

Policy S-5.1: Storage of Hazardous Materials. Strictly enforce the regulations governing the storage of chemical, biological, and other hazardous materials as set forth in California Code of Regulations, Title 22, Division 4.5.

4.9.2.4 Walnut Creek General Plan

The Walnut Creek General Plan is a comprehensive long-range general plan for the physical development of the City of Walnut Creek. Goals and policies related to Hazards and Hazardous Materials are listed below.

Goal 3: Reduce dangers from hazardous materials.

Policy 3.1: Facilitate the proper disposal of hazardous materials.

Policy 3.6: Require that new development and redevelopment protect public health and safety from hazardous materials.

4.9.2.5 City of Lafayette Encroachment Permit Requirements

Section 3-2 of the City's building regulations outlines requirements for encroachment permits when development projects encroach into public rights-of-way during construction. Examples of encroachment could include temporary use of public rights-of-way for staging, construction, or traffic control purposes. Projects with high volumes of truck traffic are also required to take out an encroachment permit to ensure that trucks do not create undue damage to public roadways. For larger projects, preparation and implementation of a construction traffic control/traffic management plan is also required to manage construction traffic in a manner that would ensure adequate traffic flow and to keep key routes open. Project access would be from Olympic Boulevard, which has been identified as a public roadway with an average of daily traffic in excess of 5,000 vehicles or more, and would require an encroachment permit should any construction staging be along Olympic Boulevard.

4.9.3 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Less Than Significant Impact

The Project Area does not contain any existing structures for demolition, and therefore would not pose a hazard regarding asbestos- and/or lead-containing materials that would trigger a hazardous building materials analysis.

Construction and routine maintenance may include the use of hazardous materials, given that construction activities involve the use of heavy equipment, which uses small and incidental amounts of oils and fuels and other potentially flammable substances. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials used during construction. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal law.

Regulatory requirements for the transport of hazardous wastes in California are specified in Title 22 of the CCR, Division 4.5, Chapters 13 and 29. In accordance with these regulations, transport of hazardous materials must comply with the California Vehicle Code, California Highway Patrol regulations (contained in Title 13 of the CCR); the California State Fire Marshal regulations (contained in Title 19 of the CCR); U.S. Department of Transportation regulations (Title 49 of the Code of Federal Regulations [CFR]); and USEPA regulations (contained in Title 40 of the CFR). The use of hazardous materials is regulated by the DTSC (Title 22, Division 4.5 of the CCR). Additionally, incorporation of BMP-2 and BMP-7, potential impacts for

creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials from residential uses would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

Less Than Significant Impact

During Project construction, hazardous substances could be released to the environment from construction-related vehicle or equipment fluid spills or leaks. Integration of BMP-2 and BMP-7 would reduce the risk of hazardous materials and would ensure that the risk to onsite workers, the public, and the environment remains at a less than significant level.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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

As noted in the Environmental Setting above, there are no schools within 0.25 miles of the Project Area. No impact would occur from Project implementation.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

No Impact

No part of Project Area is included on any list of hazardous materials sites compiled pursuant to Government Code § 65962.5. No areas within the Project Area are currently restricted or known to have hazardous materials present. No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒

No Impact

The Project is not located within an airport land use zone/plan, within two miles of a public airport, or in the vicinity of a private air strip. Therefore, the Project would not result in a safety hazard to people residing or working in the area. No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐

Less Than Significant With Mitigation Incorporated

Construction activities associated with implementation of the Proposed Project would include operation of heavy equipment on roadways that could potentially interfere with traffic movement and impact evacuation procedures in the event of an emergency. Creating an access to the new proposed trail from Olympic Boulevard would be such an activity. However, with implementation of Mitigation Measure TRANS-1, which would require the Park District to make provisions to allow emergency responders through any work area or clearly designate alternate routes. Minimal delays would occur while crews reposition equipment and vehicles to ensure adequate room for emergency vehicles to pass. Mitigation Measure TRANS-1 would ensure that unattended authorized work vehicles are not parked in a way that would block the road when there are no operators in attendance to move them and that emergency responders have access. No road closures would be required as part of implementation of the Proposed Project. Therefore, with implementation of TRANS-1, impacts associated with the interference of an adopted emergency response plan or emergency evacuation plan would be less than significant with mitigation.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Proposed Project would not involve construction of new habitable structures or homes, or indirectly lead to the creation of new habitable structures or homes. However, the Proposed Project is located in proximity to existing development and is within a region with densely vegetated areas. The Project Area is not within a State Responsibility Area (SRA) and not within a Very High Fire Hazard Severity Zone (California Department of Forestry and Fire Protection [CAL FIRE] 2024 and 2009). Implementing BMP-6, Fire Prevention measures would ensure that impacts remain at a less than significant level. No separate mitigation measures are required.

4.9.4 Mitigation Measures

Mitigation measure TRANS-1 to address potentially significant impacts from Project implementation is provided within Section 4.17, Transportation. With implementation ofTRANS-1 impacts would be less than significant. Additionally, BMPs have been identified and have been listed below:

BMP 2: **Equipment Contaminants.** EBRPD shall comply with applicable stormwater ordinances, stormwater management plans, and BMPs to prevent or minimize the potential release of equipment-related petroleum contaminants into surface waters and groundwater. Implementation of standard construction procedures and precautions for working with petroleum and construction chemicals would further ensure that the impacts related to chemical handling during Project construction would be minor.

Applicable ordinances would be the City of Lafayette Chapter 5-4 of the Municipal Code, which requires that all development projects within the City of Lafayette are prohibited to discharge non-stormwater discharge into the City's stormwater system, follow the Contra Costa Clean Water Program Stormwater C.3. Guidebook, and follow the BMP's listed in Section 5-409 of the Lafayette Municipal Code.

BMP 7: **Hazardous Materials Storage/Disposal.**

- Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into State waters or its tributaries will be contained in watertight containers or removed from the Project Area.
- Use biodegradable chainsaw bar oil.
- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.

- Store hazardous materials and wastes in watertight containers, store in appropriate secondary containment, and cover them at the end of every workday or during wet weather or when rain is forecast.
- Arrange for appropriate disposal of all hazardous wastes.
- Fueling of equipment and vehicles will only occur in upland areas. When occurring within 100 feet of open or flowing water, secondary containment will be used while fueling.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 Groundwater Resources and Water Supply

The California Department of Water Resources defines state groundwater basins based on geologic and hydrogeologic conditions. There are no defined groundwater basins in the Project Area. The City of Lafayette does not utilize groundwater as its primary water supply (City of Lafayette 2022). Water supply for the City of Lafayette is provided through East Bay Municipal Utilities District (EBMUD), through resources sourced from the Mokelumne River Watershed in the southern Sierras conveyed through the 385-mile water supply pipelines of the Mokelumne Aqueduct, which traverses the City of Lafayette south of Highway 24. EBMUD water supply system consists of reservoirs, aqueducts, treatment and distribution facilities from the Mokelumne River Basin in the Sierra Nevada to the East Bay Area (EBMUD 2024).

4.10.1.2 Surface Waters

As mentioned in Section 4.4, Biological Resources, the Project Area does have one intermittent drainage. Intermittent drainages are linear features that exhibit a bed and bank, an Ordinary High Water Mark (OHWM), and flow for weeks or months following significant precipitation events. Intermittent drainages differ from ephemeral drainages in that they flow for longer duration and are influenced by groundwater sources. This usually results in greater quantities and duration of flow relative to ephemeral drainages.

This drainage is located outside of the Project Impact Area in the northern portion of the Project Area. The drainage flows through Coast live oak woodland.

Additionally, the Project Area does have two ephemeral drainages. Ephemeral drainages are linear features that exhibit a bed and bank and an OHWM. These features typically convey runoff for short periods of time, during and immediately following rain events, and are not influenced by groundwater sources at any time during the year. The drainage features can be found on Figure 4.4-1.

The northernmost ephemeral drainage is located on the south end of the fork in the Project alignment and supported a patch of many-flowered wild-rye. The southernmost ephemeral drainage is culverted and located between a residential property and the arroyo willow thickets vegetation community.

4.10.1.3 Flooding and Drainage

Flooding is inundation of normally dry land as a result of a rise in surface water levels or rapid accumulation of stormwater runoff during storm events. The Federal Emergency Management Agency (FEMA), through its Flood Insurance Rate Mapping program, designates areas where urban flooding could occur during 100-year and 500-year flood events. A 100-year flood event has a one-percent probability of occurring in a single year. 100-year floods can occur in consecutive years or periodically throughout a decade. A 500-year flood event has a 0.2 percent probability of occurring in a single year. The Project Area is not within an identified flood hazard zone (FEMA 2024).

4.10.1.4 Seiche

A seiche is a standing wave or an oscillation in an enclosed or partially enclosed body of water. Sources of seiche activity include seismic events such as earthquakes or fault slips. The key requirement for the formation of a seiche is that a body of water be at least partially bounded, allowing for a standing wave to form. The Lafayette Reservoir, located approximately 2.3-miles west of the Proposed Project, is the only body of water in the surrounding area of a sufficient size to produce a seiche.

4.10.2 Regulatory Framework

4.10.2.1 Federal

Clean Water Act

The CWA, enacted by Congress in 1972 and amended several times since its inception, is the primary federal law regulating water quality in the United States and forms the basis for several state and local laws throughout the country. Its objective is to reduce or eliminate water pollution in the nation's rivers, streams, lakes, and coastal waters. The CWA authorizes the USEPA to implement federal water pollution control programs such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the CWA is administered by the USEPA and USACE. At the state and regional levels, the act is administered and enforced by the State Water Resources Control Board and the nine Regional Water Quality Control Boards (RWQCBs).

4.10.2.2 State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Division 7 of the Water Code Sections 13000, et sec.) is the primary water quality control law in California. Porter-Cologne established the State Water Resources Control Board and divided the state into nine regional basins, each overseen by a RWQCB. The nine RWQCBs have the primary responsibility for the coordination and control of water quality within their respective jurisdictional boundaries. The Porter-Cologne Act requires the RWQCBs to establish water quality objectives while acknowledging that water quality may be changed to some degree without

unreasonably affecting beneficial uses. Water quality objectives are limits or levels of water quality constituents or characteristics established for the purpose of protecting beneficial uses. Designated beneficial uses, together with the corresponding water quality objectives, also constitute water quality standards under the federal CWA. Therefore, the water quality objectives form the regulatory references for meeting state and federal requirements for water quality control.

4.10.2.3 Regional

San Francisco Bay Water Quality Control Plan (Basin Plan)

The Water Quality Control Plan for the San Francisco Bay Basin is the master water quality control planning document used to designate beneficial uses and surface and ground water quality objectives. The Project Area is located within the water quality control jurisdiction of Region 2, the San Francisco Bay RWQCB. Region 2 is tasked with implementing the adopted Basin Plan for the San Francisco Bay Basin through planning, permitting, and enforcement of established water quality objectives. In accordance with State Policy for Water Quality Control, Region 2 employs a range of beneficial use designations for surface waters (including creeks, streams, lakes and reservoirs), groundwaters, marshes, and mudflats that serve as the basis for establishing water quality objectives, discharge conditions, and prohibitions (California Water Boards 2023).

Contra Costa County Clean Water Program

The Contra Costa County Clean Water Program (CCCWP) supports member agencies in implementing stormwater quality activities in compliance with state and Federal water quality mandates. Lafayette along with all other incorporated cities and unincorporated areas in Contra Costa County participate in the CCCWP as permittees. Members of this program are regulated waste dischargers under an National Pollutant Discharge Elimination System (NPDES) permit program Municipal Regional Stormwater NPDES Permit (Order No. R2-2015-0049) issued by the San Francisco Bay RWQCB, responsible for municipal storm drain systems and water courses that they own and operate. Municipal Storm Sewer Systems (MS4s) carry stormwater runoff from hard surfaces such as roofs and pavement directly to creeks, wetlands and the Bay/Delta. Under the Municipal Regional Stormwater Permit (MRP), stormwater pollution prevention includes limiting trash and other pollutants from entering the storm drain. Some examples of MRP mandated local activities include implementing BMPs when washing or renovating paved areas, practicing good housekeeping measures to limit pollution, requiring land development projects (public and private) to incorporate low impact development features to reduce runoff pollution over the life of a project (CCCWP 2024).

4.10.2.4 Local

Lafayette General Plan

The Lafayette General Plan is a comprehensive long-range general plan for the physical development of the City of Lafayette (City of Lafayette 2002). The various elements within the General Plan include goals

and policies for the physical development of the City. Goals and policies related to preservation of natural topography, and water quality are listed below.

Open Space and Conservation Element

Goal OS-3: Maintain the semi-rural character and beauty of the city by preserving its open and uncluttered natural topographic features.

Policy OS 4.1: Riparian Vegetation. Preserve, protect, and restore riparian habitat, particularly the native riparian woodland species and associated understory plants.

Goal OS-5: Preserve and protect creeks, streams, and other watercourses in their natural state.

Policy OS 5.1: Protect stream bank stability.

Goal OS-6: Improve water quality in watercourses.

Safety Element

Policy S-3.1. Reduce Flood Hazards. Reduce flood risk by maintaining effective flood drainage systems and regulating construction.

Policy S-3.2: Flood Protection Standard. In the review of flood control for proposed new development, establish as a standard the flood recurrence intervals used by the Contra Costa County Flood Control District (e.g., the 100-year flood event). (Reso. 2009- 021, 2009)

Walnut Creek General Plan

The Walnut Creek General Plan is a comprehensive long-range general plan for the physical development of the City of Walnut Creek (City of Walnut Creek 2006). The various elements within the General Plan include goals and policies for the physical development of the City. Goals and policies related to preservation of natural topography, and water quality are listed below.

Natural Environment

Goal 3: Maintain and enhance the area's creek systems, their riparian environments, and their recreational amenities.

Policy 3.1: Restore riparian corridors and waterways throughout the city.

Safety and Noise

Goal 2: Reduce the potential for flooding in flood-prone areas.

Policy 2.1: Reduce the risks of property damage and personal injury due to flooding.

4.10.3 Hydrology and Water Quality (X) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐

Less Than Significant Impact

The Proposed Project involves construction of trail segments within Calaveras Ridge Trail system which would provide connectivity to existing trails in the region. The Project does not involve the development or rehabilitation of sewage or water systems. Proposed ground-disturbing activities could temporarily produce sediments that contaminate nearby surface waters; however, existing trail segments would be constructed to reduce erosion or sedimentation problems. Other temporary impacts to water quality could result from releases of fuels or other fluids from equipment during the construction process. However, implementing BMP-1, BMP-2, BMP-3, and BMP-7, in addition to standard construction BMPs would negate this potential impact. Therefore, any adverse impacts to surface waters would be less than significant with mitigation incorporated.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒

No Impact

The Proposed Project is limited to the construction of a new trail segment and there is no component of the Project that would substantially decrease groundwater supplies or interfere with groundwater recharge. There would be no impact.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 that would:				

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 offsite;	☐	☐	☐	☒
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒

Less Than Significant Impact

i) Existing drainage patterns within the Project Area would not be altered in a manner that would significantly increase erosion or siltation. Existing trail segments with poor drainage would be improved to reduce erosion or sedimentation problems. Any impacts would be less than significant.

No Impact

ii) The drainage patterns would not be altered in a manner that would significantly increase the rate or amount of surface runoff or result in onsite or offsite flooding. No impact.

Less Than Significant Impact

iii) The Proposed Project would comply with Department of Parks and Recreation Trail Design Standards and would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. No stormwater drainage system is planned in association with identified trail improvements. Therefore, there is a less than significant impact from this Project.

No Impact

iv) As discussed in the Environmental Setting above, The Project Area is not located in a FEMA 100-year flood zone. The Proposed Project would neither place structures nor change the landscape in a way that would impede flows. No impact.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐

Less Than Significant Impact

The Proposed Project is not located in an area at risk for tsunami or seiche zones. Some Project locations could be subject to mudflows or landslides during severe weather events. However, these are existing conditions and Project implementation would not introduce potential new pollutants to the area. Therefore, a less than significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Less Than Significant Impact

As described in a) above, temporary impacts to water quality could result from ground-disturbing activities that produce sediments and through releases of fuels or other fluids from equipment during the construction process. The Project would not conflict with or obstruct implementation of a water quality control plan. Additionally, with incorporation of BMP-1, BMP-2, BMP-3, and BMP-7, standard construction BMPs and following required state law regulations (see Section 2 *Project Description* and *Hazards and Hazardous Materials* above) into the Project would reduce any adverse impacts to surface waters to a less than significant impact.

4.10.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required. However, the relevant BMP measures are listed here: .

BMP 1: **Temporary Fencing.** The EBRPD shall install construction barrier fencing (including sediment fencing and straw wattles) to prevent contaminants and debris from entering waterways. Before construction begins, EBRPD shall identify the locations for the barrier fencing and mark those locations with stakes or flagging.

BMP 2: **Equipment Contaminants.** EBRPD shall comply with applicable stormwater ordinances, stormwater management plans, and BMPs to prevent or minimize the potential release of equipment-related petroleum contaminants into surface waters and groundwater. Implementation of standard construction procedures and precautions for working with

petroleum and construction chemicals would further ensure that the impacts related to chemical handling during Project construction would be minor.

BMP 3: **Erosion Control.** Erosion control materials that use plastic or synthetic monofilament netting will not be used in order to prevent species from becoming entangled, trapped or injured. This includes products that use photodegradable or biodegradable synthetic netting, which can take a full calendar year or more to decompose. Acceptable materials include natural fibers such as jute, coconut, twine or other similar fibers.

BMP 7: **Hazardous Materials Storage/Disposal.**

- Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into State waters or its tributaries will be contained in watertight containers or removed from the Project Area.
- Use biodegradable chainsaw bar oil.
- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- Store hazardous materials and wastes in watertight containers, store in appropriate secondary containment, and cover them at the end of every workday or during wet weather or when rain is forecast.
- Arrange for appropriate disposal of all hazardous wastes.

4.11 Land Use and Planning

4.11.1 Environmental Setting

As mentioned in the Project Description, Section 2.0,, EBRPD is proposing a new 2.5-mile regional trail segment to the Calaveras Ridge Regional Trail consisting of 1.2- miles of new trail and 1.3-miles of an existing dirt roadway within the Burton Ridge Vicinity. The northern part of the trail will ultimately connect with the Lafayette/Morgana Regional Trail to the north of the Project Area. Access improvements would be made along the sidewalk of Olympic Boulevard to the entrance of the new Calaveras Ridge Trail segment to facilitate the connection. The southern portion of the trail would connect to the Rohrer Trail on Rohrer Drive, which provides access to the Las Trampas Regional Trail.

The Project Area is primarily undeveloped, with sections located on private property used for equestrian activities and pastureland. A dirt road runs intermittently through the central portion of the Project Area, which will be utilized as a connection for the new trail segments. There are portions of the new trail that have been covered with mulch from the private landowners. The surrounding land uses are residential single-family homes to the north, west and south, and a senior living residence to the east.

The Project portions within the City of Lafayette are zoned Low-Density Residential District -5 (LDR 5) and Low-Density Residential District-10 (LDR). The Project portions within the City of Walnut Creek is zoned Planned Development (PD) and the General Plan Designation is Medium Multi-Family (MFM).

4.11.2 Land Use and Planning (XI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☒	☐

Less Than Significant Impact

Implementation of the Proposed Project would not involve any new development that would physically divide a community. The Project alignment will utilize existing EBRPD land that is currently undeveloped, and then procured easements with the existing landowners to establish access through private land. While the new trail would slightly alter the natural landscape, it would not create a division of land. Any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 would not change the City of Lafayette General plan or the Walnut Creek General Plan land use and zoning. The Proposed Project would be consistent with Contra Costa County General Plan policies. The Project is also consistent with the EBRPD Master Plan. The Project would not result in significant impacts on any land use plan, policy, or regulation. Therefore, this impact is less than significant.

4.11.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.12 Mineral Resources

4.12.1 Environmental Setting

Minerals are defined as any naturally occurring chemical elements or compounds formed by inorganic processes and organic substances. Minable minerals are defined as a deposit of ore or minerals having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the Project Area. The conservation, extraction, and processing of mineral resources is essential to meeting the needs of society.

The Surface Mining and Reclamation Act of 1975 (SMARA) states that cities and counties shall adopt ordinances "...that establish procedures for the review and approval of reclamation plans and financial

assurances and the issuance of a permit to conduct surface mining operations…" (PRC Section 2774). The intent of this legislation is to ensure the prevention or mitigation of the adverse environmental impacts of mining, the reclamation of mined lands, and the production and conservation of mineral resources are consistent with recreation, watershed, wildlife, and public safety objectives (PRC Section 2712).

SMARA requires the State Geologist to classify land into Mineral Resource Zones (MRZs) according to the known or inferred mineral potential of that land. The process is based solely on geology, without regard to existing land use or land ownership. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized by local government decision makers and considered before land use decisions, which could preclude mining, are made. Areas subject to California mineral land classification studies are divided into the following Mineral Resource Zone (MRZ) categories that reflect varying degrees of mineral potential:

- MRZ-1: Areas of no mineral resource significance
- MRZ-2: Areas of identified mineral resource significance
- MRZ-3: Areas of undetermined mineral resource significance
- MRZ-4: Areas of unknown mineral resource significance

All of the proposed trail segments are within either the MRZ-3 or MRZ-4 zone.

No areas within the City of Lafayette or the City of Walnut Creek contain existing mineral resources, and there are no mineral resources extraction activities currently occurring. Neither the State of California, Contra Costa County, nor the Cities have designated mineral resources recovery areas or preservation sites in any portion of the City of Lafayette or the City of Walnut Creek (City of Lafayette 2002 and City of Walnut Creek 2006).

4.12.2 Mineral Resources (XII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact

The Proposed Project is located within an MRZ classification as MRZ-3 or MRZ-4. As defined above in 4.12.1 Environmental Setting, MRZ-3 and MRZ-4 are known as "Areas of undetermined mineral resources significance" and "Areas of unknown mineral resource significance" respectively. Construction and operation of the Proposed Project does not preclude the extraction of these mineral resources in the future. Therefore, implementation of the Proposed Project would not result in the loss of availability of a known mineral resource. As less than significant impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact

The Proposed Project is not located within a current locally important mineral resources recovery site and it has not been historically mined (City of Lafayette 2002 and City of Walnut Creek 2006). As described in item a), the Proposed Project Area is classified as MRZ-3 and MRZ-4, however it has not been delineated within the general plan or other land use plans as a locally important mineral resource recovery site. As such, a less than significant impact would occur and no mitigation is required.

4.12.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.13 Noise

4.13.1 Environmental Setting

This section is based on the analysis and recommendations presented in the Noise Impact Assessment Memorandum prepared for the proposed Calaveras Ridge Trail Project (Appendix E, ECORP 2024d).

4.13.1.1 Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels/community noise equivalent level (in L_{dn}/CNEL). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- **Equivalent Noise Level (L_{eq})** is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- **Day-Night Average (L_{dn})** is a 24-hour average L_{eq} with a 10 A-weighted decibel (dBA) "weighting" added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.

- **Community Noise Equivalent Level (CNEL)** is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 pm to 10:00 pm and a 10-dBA weighting added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Noise can be generated by several sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations.

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 decibels (dB) for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed (Federal Highway Administration [FHWA] 2011).

The manner in which older structures in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer structures is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc. 2006).

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70-dBA range, and high, above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1.0 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3.0-dBA change is considered a just-perceivable difference.

- A change in level of at least 5.0 dBA is required before any noticeable change in community response would be expected. An increase of 5.0 dBA is typically considered substantial.

A 10.0-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Sensitive Noise Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Per the City General Plan Noise Element, noise-sensitive receptors are defined as hospitals, convalescent homes, schools, and libraries. Residential dwellings are also of concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. The Project Area spans 2.5 miles through Lafayette, generally from the Pleasant Hill Road and Olympic Boulevard intersection to Oak Canyon Road. Sensitive receptors in the Project Area consist of single-family residences, some of which are located directly adjacent to the existing trail. Due to the linear nature of construction along the trail, the distance between construction activities and sensitive receptors will vary.

4.13.1.2 Vibration Fundamentals

Ground vibration can be measured several ways to quantify the amplitude of vibration produced, including through peak particle velocity (PPV) or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively. Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

4.13.1.3 Existing Ambient Noise Environment

The Project Area is a linear site spanning through a portion of the City of Lafayette and is impacted by noise sources typical of a small city. The American National Standards Institute (ANSI) Standard 12.9-2013/Part 3 *Quantities and Procedures for Description and Measurement of Environmental Sound – Part 3: Short-Term Measurements with an Observer Present* provides a table of approximate background sound levels in L_{dn}, daytime L_{eq}, and nighttime L_{eq}, based on land use and population density. The ANSI standard estimation divides land uses into six distinct categories. Descriptions of these land use categories, along with the typical daytime and nighttime levels, are provided in Table 4.13-1. At times, one could reasonably expect the occurrence of periods that are both louder and quieter than the levels listed in the table. ANSI notes, "*95% prediction interval [confidence interval] is on the order of ±10 dB*." The majority of the Project Area would be considered ambient noise Category 4.

Table 4.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density

Category	Land Use	Description	People per Square Mile	dBA		
				Typical L_{dn}	Daytime L_{eq}	Nighttime L_{eq}
1	Noisy Commercial & Industrial Areas and Very Noisy Residential Areas	Very heavy traffic conditions, such as in busy, downtown commercial areas; at intersections for mass transportation or other vehicles, including elevated trains, heavy motor trucks, and other heavy traffic; and at street corners where many motor buses and heavy trucks accelerate.	63,840	67	66	58
2	Moderate Commercial & Industrial Areas and Noisy Residential Areas	Heavy traffic areas with conditions similar to Category 1, but with somewhat less traffic; routes of relatively heavy or fast automobile traffic, but where heavy truck traffic is not extremely dense.	20,000	62	61	54
3	Quiet Commercial, Industrial Areas and Normal Urban & Noisy Suburban Residential Areas	Light traffic conditions where no mass-transportation vehicles and relatively few automobiles and trucks pass, and where these vehicles generally travel at moderate speeds; residential areas and commercial streets, and intersections, with little traffic, compose this category.	6,384	57	55	49
4	Quiet Urban & Normal Suburban Residential Areas	These areas are similar to Category 3, but for this group, the background is either distant traffic or is unidentifiable; typically, the population density is one-third the density of Category 3.	2,000	52	50	44
5	Quiet Residential Areas	These areas are isolated, far from significant sources of sound, and may be situated in shielded areas, such as a small wooded valley.	638	47	45	39

Table 4.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density

6	Very Quiet Sparse Suburban or rural Residential Areas	These areas are similar to Category 4 but are usually in sparse suburban or rural areas; and, for this group, there are few if any nearby sources of sound.	200	42	40	34

Source: The American National Standards Institute (ANSI) 2013
Note: L_{dn} = Day-Night Average Sound Level; L_{eq} = Equivalent Noise Level

The City of Layfette General Plan Noise Element references a map of projected noise contours from 1998 (Map VII-1 of City General Plan Maps) to help assess the compatibility between land uses and future noise levels in the city. This map is used to determine whether a proposed development or land use is in an area that requires special noise mitigating measures. The Project Area falls within a noise contour of 55 dBA L_{dn}. While it is noted that Map VII-1 dates back to 1998, the projected noise level of 55 dBA L_{dn} generally verifies the identification of the Project Area as located in ANSI Category 4 (52 dBA L_{dn}). Thus, for the purposes of this analysis the ambient noise environment affecting the Project Area is considered to range from 52 to 55 dBA L_{dn} with daytime and nighttime noise levels of 50 dBA L_{eq} and 44 dBA L_{eq}, respectively.

4.13.2 Noise (XIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Per the City General Plan Noise Element, noise-sensitive receptors are defined as hospitals, convalescent homes, schools, and libraries (City of Lafayette 2002). The Project Area spans 2.5 miles through Lafayette, generally from the Pleasant Hill Road and Olympic Boulevard intersection to Oak Canyon Road and is therefore predominately surrounded by noise-sensitive residential receptors. Virtually all aspects of Project implementation would involve construction activity that would occur in proximity to these land uses; however, due to the linear nature of construction for the Proposed Project, noise producing activity would not be concentrated exclusively at the nearest position to any given residential receptor.

4.13.2.1 Onsite Project Construction Noise

Construction noise associated with the Proposed Project would be temporary and would vary depending on the specific nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., site preparation, grading, excavation.) Noise generated by construction equipment, including earth movers (e.g., dozers and excavators), can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

Sensitive receptors in the Project Area consist of single-family residences, some of which are located directly adjacent to the existing trail Section 5-207 of the City's Code of Ordinances states that construction (including drilling, repair, alteration, and demolition work) between the hours of 10:00 p.m. and 7:00 a.m. on weekdays or at any time on Sundays or holidays that creates a noise disturbance across property lines or violates the noise level limit standards (50 dBA L_{eq} at a single-family residence) is prohibited..

Additionally, Section 5-208 of the City's Code of Ordinances states that as long as construction occurring between the hours of 8:00 a.m. and 8:00 p.m. on weekdays and between the hours of 10:00 a.m. and 6:00 p.m. on Sundays and holidays is allowed as long as the resultant noise level at the nearest affected property does not exceed 80 dBA.

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptors, the construction equipment noise levels were calculated using the Federal Highway Administration's Roadway Noise Construction Model. Predicted construction noise is then compared against the City standard of 80 dBA at the nearest affected property. Due to the linear nature of construction along the trail, the distance between construction activities and sensitive receptors will vary. For this analysis, a reasonable proxy distance of 100 feet between Project construction activity and any given residential receptor was used. While it is acknowledged that some construction activities may occur closer than 100 feet to certain residences, the activity will not be concentrated at a single location but will instead move intermittently throughout the Project Site as construction progresses.

The recent Fifth District of Appeal decision in *King and Gardiner Farms, LLC v. County of Kern et al.* (2020) 45 Cal.App.5th 814, held that the use of an absolute noise threshold for evaluating all ambient noise impacts violated CEQA because it did not provide a "complete picture" of the noise impacts that may result from implementation of the ordinance. As such, the Proposed Project's construction noise is estimated and then added to the average daily ambient noise level in the Project Area as determined by referencing the ANSI Standard 12.9-2013/Part 3 *Quantities and Procedures for Description and Measurement of Environmental Sound* identified in Table 4.13-1 above. As identified, the majority of the Project Area would be considered ambient noise Category 4, which generally experiences 50 dBA L_{eq}

during the daytime. As previously described, the dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. For example, a 65-dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by three dB). Furthermore, when combining two separate sources where one of the noise sources is 10 dB or greater than the other noise source, the noise contribution of the quieter source is completely obscured by the louder source.

Table 4.13-2. Construction Average (dBA) Noise Levels at Nearest Receptors (20 Feet Distant)

Construction Phase	Average Ambient Noise Level* (dBA L_{eq})	Existing Ambient Noise + Exterior Construction Noise Levels (dBA L_{eq})	Construction Noise Standard (dBA L_{eq})	Exceeds Standards?
Demolition	50.0	77.1	*80*	**No**
Site Preparation		77.1	*80*	**No**
Grading		77.1	*80*	**No**
Trail Construction		77.1	*80*	**No**

Source: Construction noise levels were calculated by ECORP Consulting using the Federal Highway Administration (FHWA) Roadway Noise Construction Model (FHWA 2006). Refer to Appendix A for Model Data Outputs.

Notes: *Average ambient noise levels of the Project Area were estimated using the ANSI Standard 12.9-2013/ Part 3 *Quantities and Procedures for Description and Measurement of Environmental Sound* identified in Table 4.13-1 above. This noise level is generally verified by the projected noise contours identified in the City General Plan Noise Element.
Construction equipment used and construction schedule information provided by the East Bay Regional Parks District.
L_{eq} = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
dBA = A-weighted decibels

As shown in Table 4.13-2, the Project's contribution of noise during construction would not exceed the City threshold of 80 dBA L_{eq} at100 feet. It is noted that this is a conservative analysis as it is very unlikely that all pieces of construction equipment would be operating at the same time for the various phases of Project construction as well as at the point closest to residential receptors.

4.13.2.2 Offsite Project Construction Traffic Noise

Project construction would result in additional traffic on adjacent roadways over the period that construction occurs. The California Emissions Estimator Model is designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys. It can be used to predict the number of construction-related automotive trips. The maximum number of Project construction trips traveling to and from the Project Area during a single construction phase would not be expected to exceed 36 daily trips in total. According to Caltrans Technical Noise Supplement to the Traffic Noise

Analysis Protocol (Caltrans 2013), a doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). The Project Area would be accessible via Olympic Boulevard and Oak Canyon Road during construction. Section 3-202 of the City's Municipal Code contains a list of public roadways with average daily traffic in excess of 5,000 vehicles (2015). Olympic Boulevard (located to the north of the Project Area and the primary access road to the construction site) and Reliez Station Road (located to the west of the Project Area) were both included on this list. The contribution of an additional 36 daily trips during a single construction phase for the Project would not result in a doubling of traffic on adjacent roadways, and therefore its contribution to existing traffic noise would not be perceptible. Additionally, it is noted that construction is temporary, and construction-related trips would cease upon completion of construction.

4.13.2.3 Operational Offsite Traffic Noise

The Project is proposing the construction of a new 1.2-mile regional trail on undeveloped land and a new 1.3-mile regional trail within the existing dirt road, totaling 2.5 miles. This expansion would connect and enhance the existing trail network. Beyond current conditions, the Project would contribute a minimal amount of traffic to local roadways. According to the Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol (Caltrans 2013), doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). The Proposed Project would not result in a doubling of traffic on vicinity roadways, and therefore its contribution to existing traffic noise would not be perceptible.

4.13.2.4 Operational Onsite Noise

The Project involves improvements to an existing trail network. Hiking/ walking trials typically generate minimal noise levels and primarily consists of people talking, footsteps, and the rustling of natural elements such as leaves and wind. The prominent noise source that could potentially affect the surrounding residential land uses would be conversation as visitors move along the trial. According to the Centers for Disease Control and Prevention, casual conversation typically produces noise levels around 60 dBA, which is comparable to the noise experienced from a dishwasher running in another room and is not generally considered disruptive. The trail is currently used by visitors daily, and the proposed improvements are not expected to increase the intensity or nature of use. Thus, the Project would not generate noise levels beyond those currently experienced in the Project Area.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

Less Than Significant Impact

4.13.2.5 Construction Vibration Impacts

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Proposed Project would be primarily associated with short-term construction-related activities. Construction in the Project Area would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is not anticipated that pile drivers would be necessary during Project construction. Vibration decreases rapidly with distance, and it is acknowledged that construction activities would occur throughout the Project Area and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment are summarized in Table 4.13-3.

Table 4.13-3. Typical Construction Equipment Vibration Levels

Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Hoe Ram	0.089
Jackhammer	0.035
Small Bulldozer/Tractor	0.003
Vibratory Roller	0.210

Source: Federal Transit Administration (FTA) 2018

The City of Lafayette does not regulate or have a numeric threshold associated with construction vibrations. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, Caltrans recommended standard of 0.3 inches per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings (Caltrans 2020).

Based on the representative vibration levels presented for various construction equipment types in Table 4.13-3 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential Project construction vibration levels. The FTA provides the following equation:

$$[PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}]$$

Table 4.13-4 presents the expected Project-related vibration levels at a distance of 20 feet.

Table 4.13-4. Construction Vibration Levels at 20 Feet							
Receiver PPV Levels (in/sec)[1]					Peak Vibration	Threshold	Exceed Threshold?
Large Bulldozer, Caisson Drilling, & Hoe Ram	Loaded Trucks	Jackhammer	Small Bulldozer/ Tractor	Vibratory Roller			
0.0006	0.0005	0.0000	0.0002	0.0014	0.0014	*0.3*	**No**

Source: California Department of Transportation (Caltrans) 2020, Federal Transit Administration (FTA) 2018
Note: in/sec = inches per second; PPV = Peak Particle Velocity

As shown in Table 4.13-4, vibration as a result of onsite construction activities in the Project Area would not exceed 0.3 PPV at the nearest structure. Thus, onsite Project construction would not exceed the recommended threshold. This impact is less than significant.

4.13.2.6 Project Operational Vibration

Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels. Traffic occurring during peak hours would not generate enough vibration to cause damage to structures. Therefore, the Project would result in negligible groundborne vibration impacts during operations. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Area is located approximately 7.1 miles southwest of the Buchanan Field Airport and is not within any airport land use plan. Aircraft noise does not significantly impact the City of Lafayette and the Proposed Project would not expose people visiting the Project Area to excess airport noise levels. Therefore, no impact would occur.

4.13.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.14 Population and Housing

4.14.1 Environmental Setting

The City of Lafayette was incorporated in 1968 and encompasses approximately 15 square miles or 9,600 acres. According to the 2023 U.S. Census Bureau, the City had an estimated population of approximately 25,048 residents in the City (U.S. Census 2023).

The City of Walnut Creek was incorporated in 1914 and is approximately 19.77 square miles, or 12,652.8 acres. According to the 2023 U.S. Census Bureau, the City of Walnut Creek had an estimated population of 69,152 residents in the City (U.S. Census 2023).

4.14.2 Regulatory Setting

4.14.2.1 City of Lafayette General Plan

The City of Lafayette General Plan Housing Element (City of Lafayette 2023b) establishes the City's housing policies. The single most important goal of the Lafayette Housing Element is to achieve an adequate supply of safe, decent housing for all residents of Lafayette. To achieve this goal, the policies and programs of the Housing Element address several major issues: Maintaining and preserving the existing housing stock; planning for the City's regional housing needs allocations; and providing additional affordable housing, particularly for senior citizens and young families.

4.14.2.2 City of Walnut Creek General Plan

The City of Walnut Creek General Plan Housing Element (2021) establishes the City's housing policies and is intended to ensure that decent, safe, affordable shelter is provided for all residents in unincorporated Placer County. The guiding principle for housing in the City’s General Plan states:

Walnut Creek supports housing of various types, densities, and prices to meet the needs of current and prospective residents of all income levels and ages. The City will promote opportunities for housing and will strive to meet the state-mandated regional fair-share numbers. The City encourages housing along transit corridors, housing for the local workforce, and housing that is attainable by and suitable for the diverse populations that call Walnut Creek home.

4.14.3 Population and Housing (XIV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

No Impact

The Proposed Project would not involve the construction of new housing or introduce new land uses associated with population increase (such as industrial or commercial centers) that would directly induce population growth. The proposed trail segment would provide connectivity to the greater Calaveras Ridge Trail system. Furthermore, minimal operation and maintenance would be required and no permanent employees would be hired as a result of the Proposed Project. No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact

The Proposed Project would not involve the construction of new housing or introduce new land uses that would cause displacement. The proposed trail segment does utilize private property, but EBRPD has established easements with the land owners, and would not result in the displacement of any buildings or residences. Therefore, there are no impacts related to housing and no displacement of existing people would occur. No migration is required.

4.14.4 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.15 Public Services

4.15.1 Environmental Setting

The EBRPD works closely with state, regional, and local agencies to ensure that the provision of public services across the Park District is sufficient and comprehensive. Park District Police officers, firefighters, and rangers support partner agency police departments, emergency service providers, and fire protection agencies. Park District rangers and the Park District Police Department are tasked with visitor contact and patrolling Park District facilities to enforce federal, state, and local laws and Park District regulations. The Park District's Public Safety division comprises three departments – Police, Fire, and Lifeguard. They provide services in law enforcement, fire-fighting and suppression, and water safety. The Public Safety Division is also responsible for fire, police, and emergency services for Park District facilities. During the peak summer season, the Public Safety Division is staffed with approximately 450 personnel including industrial firefighters, sworn police officers providing law enforcement through policing contracts, as well as approximately 150 members in the Volunteer Trail Safety Patrol (Park District 2024). Emergency services including fire suppression, search and rescue, and pre-hospital emergency medical care are provided by

the Park District's Fire Department. The Park District's Police Department provides law enforcement services 24 hours per day (Park District 2024).

4.15.2 Public Services (XV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Fire Protection

Less Than Significant Impact

Visitation of the Proposed Project Area would increase due to the new trail segment and connectivity to the greater Calaveras Ridge Trail system, however, the level of required public services is expected to be only a slight increase. The use of construction equipment in the vicinity of flammable vegetation at the Project areas could present an increased risk of fire that could result in additional demands on EBRPD fire and local fire response teams. Any impact on services would be temporary and nothing in the Project scope would contribute to the need for an increase in the level of fire protection after construction is complete. With implementation of BMP-6, the potential impacts to fire protection services would remain at a less than significant level.

Police Protection

Less Than Significant Impact

Visitation of the Proposed Project Area would increase due to the new trail segment and connectivity to the greater Calaveras Ridge Trail system, however, the level of required public services is expected to be only a slight increase. The Proposed Project would not result in a substantial increase in calls for police

services and would not generate the need for additional officers or equipment. Therefore, the Proposed Project would result in a less than significant impact on police services in the area and would not result in the need for additional or altered police protection facilities.

Schools

No Impact

The Proposed Project would not include the construction of housing or employment-generating facilities. Therefore, it would not increase demand for school services, and the Proposed Project would have no impact on schools.

Parks

Less Than Significant Impact

Visitation of the Proposed Project Area would increase due to the new trail segment and connectivity to the greater Calaveras Ridge Trail system, however, the level of required public services is expected to be only a slight increase. However, the Proposed Project would not increase the demand for new park facilities within the Park District's jurisdiction and would enhance park amenities in the Project Area. Any impacts would be less than significant.

Other Public Facilities

Less Than Significant Impact

Visitation of the Proposed Project Area would increase due to the new trail segment and connectivity to the greater Calaveras Ridge Trail system, however, the level of required public services is expected to be only a slight increase. However, the Proposed Project would not increase the demand for any other public facilities within the Park District's jurisdiction. Any impacts would be less than significant.

4.15.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.16 Recreation

4.16.1 Environmental Setting

Recreation is one of the primary uses of many Park District facilities that have public access facilities or are designed for public use. Regional parks located near population centers or urban areas are designed and planned to accommodate higher levels of public access and provide managed access to natural and undeveloped parklands, providing visitors the opportunities to enjoy a wide variety of recreational activities, facilities, services, and programs. These recreational opportunities include hiking, biking, horseback riding, bird watching, and picnicking. In addition, many other open space lands and trails

maintained by various agencies or co-managed by the Park District and partner agencies also provide access to recreational opportunities.

As mentioned in the Project Description, the Calaveras Ridge Regional Trail is one of the originally designated regional trail corridors in the Park District Master Plan. This multi-use trail corridor travels along the Interstate 680 corridor connecting six regional parks. It serves communities from the Sunol Regional Wilderness, through Pleasanton Ridge to Dublin Hills into Contra Costa County where it continues through Las Trampas Regional Wilderness to the City of Lafayette through Briones Regional Park, with connections to the Carquinez Strait. In total, the Calaveras Ridge Trail will be a 20.5-mile unpaved regional trail. Approximately 54% of this trail is complete at of 2023.

This proposed segment will be within the Burton Ridge Vicinity that will provide connectivity to the Briones Reserve by the Lafayette/Morgana Regional Trail and eventually to Las Trampas Regional Preserve. This trail segment is vital to connect Briones Regional Park to the Las Trampas Regional Trail.

4.16.2 Recreation (XVI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Proposed Project would include approximately 2.5 miles of new trail segment within the Calaveras Ridge Regional Trail. The Proposed Project would generate additional visitor numbers as it would provide connection to the Briones Preserve and the Las Trampas Regional Trail. Implementation of the Proposed Project would enhance available trails within EBRPD trail network as it is providing connectivity to existing trails. However, the Proposed Project is not expected to result in increased use of adjacent facilities to a level that would result in physical degradation of those facilities.

Additionally, under current conditions, the Project Area has unofficial visitor made trails, cut fences, and contains no controls or limitations as to where visitors can walk/hike. With implementation of the Project, the impacts to the existing area would aggregate people to specific areas and would enhance the existing condition of the area. Therefore, implementation of the Proposed Project would result in a less than significant impact to recreational facilities.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☒	☐	☐

Less Than Significant Impact With Mitigation Incorporated

The Proposed Project is in fact a recreational facility located within an ecologically sensitive area. However, it was sited specifically to avoid and has been designed to minimize impacts to resources so as to avoid such adverse physical effects on the environment. The environmental impacts of construction and operation of the Proposed Project, including required mitigation measures, are discussed in this document. Impacts would be less than significant with mitigation as described in other sections of this document.

4.16.3 Mitigation Measures

Mitigation measures to address potentially significant impacts from Project implementation are provided in the appropriate resource sections of this Initial Study. With implementation of these mitigation measures, impacts would be less than significant.

4.17 Transportation

4.17.1 Environmental Setting

The City of Lafayette and Walnut Creek area includes numerous roads and transportation systems, and EBRPD would utilize freeways, arterials, and local streets to access the Project Area. The primary highway in the area is SR-24. The Project would utilize Olympic Boulevard to the entrance of the new Calaveras Ridge Trail segment to facilitate the connection and the southern portion of the trail would connect to the Rohrer Trail on Rohrer Drive.

4.17.1.1 Public Transportation

Transit agencies that provide local and regional transit service to the City of Lafayette and City of Walnut Creek include BART and County Connection. The San Francisco BART is a heavy-rail public transit system that connects the San Francisco Peninsula with communities in the East Bay and South Bay. BART service currently extends as far as Millbrae, Richmond, Antioch, Dublin/Pleasanton, and Berryessa/North San José. BART operates in five counties (San Francisco, San Mateo, Alameda, Contra Costa, and Santa Clara) with 131 miles of track and 50 stations. The County Connection provides fixed-route and paratransit bus service for communities in Central Contra Costa County.

4.17.2 Transportation (XVII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated

The Proposed Project would not permanently alter existing roadways, nor would it add a substantial number of trips to the current circulation system. In addition, the Proposed Project does not involve a change in land use or affect transportation policies.

Construction of the Proposed Project would result in a temporary increase in truck trips on the local roads to deliver materials and machinery to the site. Additionally, there would be a limited number of vehicle trips from the work crew just outside of the construction work hours (between 7:00 a.m. and 7:00 p.m.). However, the temporary construction related trip increase is not expected to substantially impact the capacity of the local road system.

The Proposed Project does include trail access improvements within the Right of Way off Olympic Boulevard, which is considered a major public roadway within the City of Lafayette. Improvements would be extending the sidewalk to provide access to the trail segment connecting to Lafayette/Morgana Regional Trail. This may result in temporary lane closure; however, implementation of Mitigation Measure TRANS-1, would ensure that impacts would be less than significant. This Mitigation Measure would require the preparation and implementation of a Construction Traffic Management Plan if any lane closures are required.

Therefore, the Project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities and potential impacts would be less than significant with incorporation of Mitigation Measure TRANS-1.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐

Less Than Significant Impact

Section 15064.3. of the CEQA Guidelines (Determining the Significance of Transportation Impacts) describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. Anticipated construction activities that would take

place during Project construction may result in a temporary increase in VMT as a result of the movement of construction personnel, equipment, and materials to and from the Project Area; however, these impacts are temporary in nature and will not substantially increase the existing VMT associated with the Project Area. As stated above, the Proposed Project will generate a slight increase to the existing number of daily/yearly visitors, as it is providing connectivity to existing trail systems in the area, but it would not be enough to substantially increase VMT. Therefore, the impact is less than significant. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Project does not include permanent new design features on roadways but would include improvements to an existing sidewalk off of Olympic Boulevard within the City of Lafayette to provide access to the new trail segment. While construction for the access improvements may require a temporary lane closure, and transport of machinery and use of light trucks on the roads around the Proposed Project Area, it would not substantially increase hazards along roadways and related impacts are less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?	☐	☒	☐	☐

Less Than Significant Impact With Mitigation Incorporated

Consistent with Mitigation Measure TRANS-1, which would require the preparation and implementation of a Construction Traffic Management Plan, coordination with emergency service providers would occur prior to construction if there are any anticipated lane closures from the access improvements. This would ensure adequate emergency access is maintained throughout Project construction. Therefore, impacts related to inadequate emergency access would be less than significant with mitigation incorporated.

4.17.3 Mitigation Measures

TRANS-1: Prepare and Implement a Construction Traffic Management Plan. If any lane closures are requires as part of Project implementation, EBRPD shall require the contractor to prepare a Construction Traffic Management Plan in accordance with City of Lafayette requirements and professional engineering standards prior to construction. The Traffic Management Plan shall specifically address the proposed sidewalk improvements to Olympic Boulevard and the

following: adequate provisions for protection of the traveling public; emergency service access; the need for temporary traffic controls (signage/flaggers); and maintenance of private property driveway access. All traffic controls, including equipment and personnel requirements, shall be consistent with the current State of California Manual of Traffic Controls for Construction and Maintenance Work Areas.

4.18 Tribal Cultural Resources

This section describes the affected environment and regulatory setting for Tribal Cultural Resources (TCRs) in the Project Area. The following analysis of the potential environmental impacts related to TCRs is derived primarily from the following sources:

4.18.1 Regulatory Setting

4.18.1.1 Assembly Bill 52

AB 52 expanded CEQA by defining a new resource category, "tribal cultural resources." AB 52 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" (Public Resources Code [PRC] Section 21084.2). AB 52 further requires that, when feasible, the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" and that meet either of the following criteria.

1. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k).*

2. *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. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.*

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments and with respect to the interests and roles of project proponents, it is the intent AB 52 to accomplish the following:

- Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.
- Establish a new category of resources in CEQA called "tribal cultural resources" (TCR) that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.

- Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
- Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated (because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources).
- In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, early in the CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision-making body of the lead agency.
- Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
- Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.
- Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
- Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

The formal consultation process requires lead agencies to work with California tribes traditionally and culturally affiliated with the geographic area of the Proposed Project. This includes those that have previously requested notice and that are listed by the State as having expertise regarding potential resources and impacts. In order to be contacted by a lead agency, tribes must submit a written request to the relevant lead agency to be notified of projects within their geographical area. As many California tribes have not completed this process, agencies may also select to utilize the tribal lists maintained by the Native American Heritage Commission in an effort to identify TCRs within a project area. Consultation must be completed before a CEQA document can be certified or adopted.

4.18.2 Summary of Tribal Consultation Under AB 52

The East Bay Regional Park District (EBRPD) contacted the Native American Heritage Commission (NAHC) to request a search of the Sacred Lands File (SLF) and for an AB 52 consultation list. Only one California

Native American tribe (the Confederated Villages of Lisjan Nation) has requested, in writing, formal notice of and information on proposed projects for which the EBRPD serves as the lead agency under CEQA. However, in an effort to identify potential TCRs, the EBRPD provides notice to this tribe and to those on the consultation list provided by the NAHC, especially when the SLF results are positive.

The NAHC responded to EBRPD's request on June 11, 2024 stating that the results of the SLF search were positive and provided an AB 52 consultation list. The EBRPD mailed letters on August 27, 2024, to the tribes on this list, including the Confederated Villages of Lisjan Nation. The EBRPD's letters included a description of the Project, its location, and stated that the tribes had 30 days to respond.

The list of tribes contacted are included in Table 4.18-1 below.

Table 4.18-1. Tribes on the NAHC Consultation List

Tribe/Tribal Affiliation	Listed Contact
Amah Mutsun Tribal Band	Valentin Lopez, Chairperson
Amah Mutsun Tribal Band	Ed Ketchum, Vice-Chairperson
Buena Vista Rancheria of Me-Wuk Indians	Jessalynn Pastran, Chairperson
Buena Vista Rancheria of Me-Wuk Indians	Jesse Galvan, THPO
Calaveras Band of Mi-Wuk Indians	Debra Grimes, Tribal Cultural Resources Specialist
Calaveras Band of Mi-Wuk Indians	Adam Lewis, Tribal Cultural Resources Assistant
Calaveras Band of Mi-Wuk Indians	Gloria Grimes, Chairperson
California Valley Miwok Tribe	Anthony Wilson, Treasurer
California Valley Miwok Tribe	Lawrence Wilson Jr., Cultural Specialist
Chicken Ranch Rancheria of Me-Wuk Indians	Stephanie Suess, Community & Resources Development Director
Chicken Ranch Rancheria of Me-Wuk Indians	Monica Fox, Tribal Administrator
Chicken Ranch Rancheria of Me-Wuk Indians	Cynthia Reyes, Cultural Manager
Chicken Ranch Rancheria of Me-Wuk Indians	Joanna Portillo-Hsu, Environmental & Planning Manager
Costanoan Rumsen Carmel Tribe	Desiree Munoz, Tribal Liaison
Costanoan Rumsen Carmel Tribe	Carla Munoz, Tribal Council
Guidiville Rancheria of California	Michael Derry, Historian
Guidiville Rancheria of California	Bunny Tarin, Tribal Administrator
Indian Canyon Mutsun Band of Costanoan	Ann Marie Sayers, Chairperson
Ione Band of Miwok Indians	Sara Dutschke, Chairperson
Jackson Rancheria Band of Miwuk Indians	Adam Dalton, Chairperson
Jackson Rancheria Band of Miwuk Indians	Rolland Fillmore, Cultural Preservation Representative
Muwekma Ohlone Tribe of the SF Bay Area	Charlene Nijmeh, Chairperson

Table 4.18-1. Tribes on the NAHC Consultation List	
Tribe/Tribal Affiliation	**Listed Contact**
Nashville Enterprise Miwok-Maidu-Nishinam Tribe	Cosme Valdez, Chairperson
Nashville Enterprise Miwok-Maidu-Nishinam Tribe	Leland Valdez, Cultural Resources
Northern Valley Yokut/Ohlone Tribe	Timothy Perez, Tribal Compliance Officer
Northern Valley Yokut/Ohlone Tribe	Katherine Perez, Chairperson
Pakan'yani Maidu of Strawberry Valley Rancheria	Tina Goodwin, Chairperson
The Ohlone Indian Tribe	Desiree Vigil, THPO
The Ohlone Indian Tribe	Vincent Medina, Cultural Leader
Wilton Rancheria	Dahlton Brown, Executive Director of Administration
Wilton Rancheria	Cultural Preservation Department
Wilton Rancheria	Herbert Griffin, Executive Director of Cultural Preservation
Wuksachi Indian Tribe/Eshom Valley Band	Kenneth Woodrow, Chairperson

The EBRPD received seven responses:

- Lorelei Alli of the Amah Mutsun Tribal Band of Mission San Juan Bautista responded via email on August 29, 2024, with recommendations to complete a SLF search at the NAHC and complete a California Historical Resources Information System (CHRIS) records search. Additionally, if cultural sensitivity is identified within one-mile of the Project, the Amah Mutsun recommend the following:
    - Cultural sensitivity training for all crew, individuals and personnel that will be onsite during all ground disturbing activities.
    - A qualified and trained archaeological monitor is present during all ground disturbing activities
    - A qualified tribal monitor is present during all ground disturbing activities
    - If human remains are identified during the Project, the Tribe provides recommendations for the treatment of the remains and any associated items
    - The tribe did not formally request AB 52 consultation.
- Adam Lewis, Tribal Cultural Resources Assistant for the Calaveras Band of Mi-Wuk Indians responded on August 29, 2024, and referred any further communication to the local tribe.
- Joanna Portillo-Hsu, Environmental & Planning Manager for the Chicken Ranch Rancheria of Me-Wuk Indians responded on August 28, 2024, stating that the tribe had no comments or concerns related to this Project.

- Corrina Gould, Chairperson for the Confederated Villages of Lisjan Nation responded on September 3, 2024, requesting consultation. Coordination and consultation with the tribe concluded on October 2, 2024. The results of the consultation are reflected in the development and inclusion of Mitigation Measures TCR-1, TCR-2 and TCR-3 (see below).
- Kanyon Sayers-Roods, Most Likely Descendent for the Indian Canyon Mutsun Band of Costanoan responded on September 3, 2024, requesting consultation. Coordination and consultation with the Ms. Sayers-Roods concluded on September 27, 2024. Ms. Sayers-Roods had no additional questions or concerns regarding the Project.
- Mr. Alan Leventhal, Archaeologist and Ethnohistorian for the Muwekma Ohlone Tribe of the San Francisco Bay Area responded on September 17, 2024, requesting consultation and referred the EBRPD to Executive Director Richard Massiatt to schedule a consultation meeting. The EBRPD provided days/times for potential virtual consultation meetings on September 17, September 24, October 1, October 7, and October 22, 2024. Executive Director Massiatt responded via email on October 23, 2024 indicating that the tribe wanted to consult on this Project and that Mr. Leventhal would be the one to coordinate consultation. The EBRPD provided days and times to facilitate consultation and welcomed days and times from Mr. Leventhal/the tribe. On October 25, 2024, Mr. Massiatt confirmed that he (and Mr. Leventhal) would be available on Tuesday November 19, 2024 at 10:30am for consultation. On November 19, 2024 at 10:30am, the tribe failed to appear at the virtual meeting. At approximately 10:40am, EBRPD staff emailed the tribe indicating they would wait on the call until 11:00am. At 11:30am, EBRPD staff followed up with the tribe again, indicating that since the tribe failed to appear at the confirmed virtual meeting, the EBRPD considered AB 52 consultation with the tribe complete for this Project. Mr. Leventhal responded at 1:42pm apologizing for missing the meeting, indicating there was a conflict with another meeting and offered to re-schedule. EBRPD staff responded at 2:13pm, indicating that the agency had made a good faith effort to consult with the tribe, based on the multiple attempts to schedule a meeting, which culminated in the tribe failing to appear at the scheduled virtual meeting. The EBRPD reiterated that the agency considered AB52 consultation with the tribe completed. However, EBRPD staff provided the mitigation measures that would be included in the CEQA document and indicated that if, after review of these mitigation measures, the tribe could submit any additional recommendations and/or concerns for consideration.
- Andrew Galvan, Chairperson for The Ohlone Indian Tribe responded on September 24, 2024, requesting consultation. Coordination and consultation with the tribe concluded on October 7, 2024. The outcome of AB 52 consultation are reflected in the development and inclusion of Mitigation Measures TCR-1 and TCR-2 (see below).

No other tribes responded during the 30-day period to request consultation.

4.18.3 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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 Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria © forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☒	☐	☐

Less Than Significant Impact With Mitigation Incorporated.

No TCRs were identified as a result of the AB 52 consultation completed by the EBRPD with three tribes (the Confederated Villages of Lisjan Nation, the Ohlone Indian Tribe, and the Indian Canyon Mutsun Band of Costanoan), or from information received from the Amah Mutsun Tribal Band. However, areas of sensitivity for TCRs were identified as a result of the overall consultation efforts. Given the potential sensitivity for encountering yet to be identified TCRs, mitigation measures TCR-1 and TCR-2 have been developed.

The Confederated Villages of Lisjan Nation also identified concerns regarding impacts to habitat and vegetation, thereby resulting in the development and inclusion of TCR-3. With implementation of the identified mitigation measures, any impacts to TCRs would be less than significant.

4.18.4 Mitigation Measures

TCR-1: **Tribal Cultural Resources Awareness Training.** A tribal cultural resources awareness training shall occur prior to Project construction, and on an as-needed basis (e.g., when new construction personnel arrive on-site).

TCR-2: **Tribal Monitoring.** A tribal monitor shall be present during trail construction within the EBRPD owned parcel, and specifically during construction of the creek crossing/bridge. The EBRPD shall develop a monitoring plan and a tribal monitor shall conduct monitoring intermittently throughout the Project Area, during ground-disturbing activities. The tribal monitor should be from an East Bay Ohlone tribe, associated with the Saclan Village (e.g., The Ohlone Indian Tribe, the Confederated Villages of Lisjan Nation, or the Muwekma Ohlone Tribe of the SF Bay Area). The Confederated Villages of Lisjan Nation and the Ohlone Indian Tribe requested to be contacted if any cultural resources were identified during Project-related construction.

TCR-3: **Project Related Planting.** The Confederated Villages of Lisjan Nation shall be consulted to provide input for the Project-related planting palette, prior to the finalization of the palette plan.

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

It is important to note that there will not be any utilities available on the proposed trail segment. No restroom, electrical services, or trash collection receptacles are proposed as part of the Project.

4.19.1.1 Water Service

Water service in the Project Area is provided by EBMUD. EBMUD is a publicly owned utility that owns, operates, and maintains the water distribution system within the City of Lafayette and Walnut Creek. EBMUD facilities collect snowmelt and runoff at the Pardee Reservoir in the Mokelumne River watershed and farther downstream in the Camanche Reservoir. EBMUD has water rights for up to 325 million gallons per day (MGD) from the Mokelumne River watershed and can store up to a 10-month supply for the 1.4 million water customers in EBMUD's service area. Runoff within the Bay Area is stored in several local reservoirs to provide emergency supplies. On average, EBMUD stores approximately a six-month emergency reserve in local reservoirs. EBMUD also has rights to up to 100 MGD from the Sacramento River in dry years through a contract with the U.S. Bureau of Reclamation that is pumped at the Freeport Regional Water Facility owned by EBMUD and Sacramento County (EBMUD 2024).

4.19.1.2 Wastewater

Central San, the Central Contra Costa Sanitary District, collects and treats wastewater in the City of Lafayette and Walnut Creek. Central San collects and cleans more than 13 billion gallons of wastewater per year for nearly 500,000 residents and more than 15,000 business on over 3,000 parcels in central Contra Costa County (Central San 2024).

4.19.1.3 Solid Waste

The Central Contra Costa Solid Waste Authority (RecycleSmart) provides solid waste services for Central Contra Costa County residents and businesses. RecycleSmart has contracted with Republic Services for the

collection, transfer and disposal of residential and commercial garbage, recycling and organics and Mt. Diablo Recycling for the processing of residential and commercial recyclable materials (RecycleSmart 2024).

4.19.2 Utilities and Service Systems (XIX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒

No Impact

The Proposed Project will not require new use, construction, or relocation of the following facilities: water, wastewater, stormwater drainage, electrical power, natural gas, or telecommunications. Therefore, the Project will have no impact on these services/facilities. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒

No Impact

The Proposed Project would not require new use, construction, or relocation to any water supplies and would not impact water supplies that are currently available. No impact would occur, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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

EBRPD would not install wastewater facilities as part of the Proposed Project. During construction of the Proposed Project, a temporary portable toilet may be needed during construction activities. Wastewater generated at the portable toilets would be contained in holding tanks and transported for disposal at approved offsite locations. No impact. No mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 Impact

The Project does not have a solid waste component and would not increase solid waste disposal. Trucks provided by EBRPD and/or its Contractor would remove debris from Project-related activities. Any impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

No Impact

The Proposed Project will comply with all federal, state, and local management and reduction statutes and regulations related to solid waste. No impact would occur, and no mitigation is required.

4.19.3 Mitigation Measures

No significant impacts were identified and no mitigation measures are required.

4.20 Wildfire

4.20.1 Environmental Setting

Typically, the California fire season extends from spring to late fall. Fire conditions arise from a combination of hot weather, an accumulation of vegetation, and low moisture content in the air. These conditions, when combined with high winds and years of drought, increase the potential for wildfire to occur. The Project Area is not within an SRA and not within a Very High Fire Hazard Severity Zone (CAL FIRE 2024 and 2009).

4.20.2 Wildfire (XX) Environmental Checklist and Discussion

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐

Less Than Significant Impact With Mitigation Incorporated

The Proposed Project is not within an SRA and not within a Very High Fire Hazard Severity Zone (CAL FIRE 2024 and 2009). Therefore, the Proposed Project would not substantially impair an adopted emergency response plan within a very high fire hazard zone. However, it is important to note that if any lane closures are required as part of Project implementation, mitigation measure TRANS-1 would be required.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐

Less Than Significant Impact

As described above, The Project Area is not within an SRA and not within a Very High Fire Hazard Severity Zone (CAL FIRE 2024 and 2009). The Project does not involve construction of structures. The Project will have a minimal impact on the vegetation and trees currently found along the alignment. Therefore, the Proposed Project would not expose visitors to increased wildfire risk. Impacts are less than significant.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☒	☐

Less Than Significant Impact

See discussion above. New infrastructure is not proposed that would exacerbate existing fire risk or result in temporary or ongoing impacts. There would be maintenance activities required of the Project Area after construction was complete. Maintenance activities may be removing vegetation or repairing the clear

span bridge, All future maintenance activities would be required to follow EBRPD's 01 51 16 Temporary Fire Protection Specifications. These specifications outline necessary measures to ensure fire safety during construction and maintenance activities. Any impacts would be less than significant.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Less Than Significant Impact

As stated above, the Proposed Project is not located in an SRA classified as very high fire hazard. The Proposed Project would not create a new source of exposure for people or structures to significant risks including flooding or landslides as a result of runoff, post-fire slope instability or drainage changes. Therefore, the impact is considered less than significant. No mitigation is required.

4.20.3 Mitigation Measures

Please see section 4.17, Traffic, for the required mitigation measures.

4.21 Mandatory Findings of Significance

4.21.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☒	☐	☐

Less Than Significant Impact with Mitigation Incorporated

Although the proposed project would not result in operational impacts, construction activities would result in potential impacts to sensitive species and/or their habitat. However, as discussed in Section 4.4 Biological Resources, implementation of Mitigation Measures BIO-1 through BIO-7 would be required.

These measures would ensure preconstruction surveys for sensitive plant and wildlife species are conducted and consultation with regulatory agencies are completed as necessary to identify and ensure appropriate protections. Mitigation measures also require that the Project obtain appropriate state and federal permits for impacts to aquatic resources (including wetlands) and riparian habitat, appropriate restoration of all temporarily disturbed areas is completed, and that the Project comply with the City of Lafayette Tree Preservation Ordinance. These measures would ensure biological resource impacts are reduced to less than significant with mitigation incorporated.

As indicated in Section 4.5 Cultural Resources, the project is expected to avoid direct impacts to known cultural resources. Further, implementation of Mitigation Measure CUL-1 would ensure potential impacts to unknown onsite cultural resources are protected. As discussed in Mitigation Measure CUL-1, should any cultural resources or human remains be encountered, construction activities would be halted, and a professional archaeologist consulted. Similarly, implementation of Mitigation Measure PALEO-1 would ensure potential paleontological resource impacts are mitigated to less than significant ensuring the Project doesn't eliminate important examples of the major periods of California history or prehistory.

With the above mitigation measures, 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 would be less than significant with mitigation incorporated.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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)?	☐	☐	☒	☐

Less Than Significant Impact

All Project impacts were found to be less than significant or less than significant with mitigation incorporated. Mitigation measures are required for those special status plant and wildlife species and sensitive habitats identified in response a) above. These measures, combined with Mitigation Measures CUL-1, PALEO-1, TCR-1 through TCR-3, would ensure the Project results in no cumulative impact and any impacts would be less than significant.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Less Than Significant Impact

Most Project-related environmental effects have been determined to pose a less than significant impact on humans. However, possible impacts from fugitive dust (Air Quality), earthquakes (Geology and Soils), construction accidents, spills, and wildfire (Hazards and Hazardous Waste), and construction-generated noise (Noise) and traffic control (Transportation/Traffic), though temporary in nature, have the potential to result in significant adverse effects on humans. These potential impacts would remain at less than significant levels with the mitigation measures that are addressed in this document.

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7.0 LIST OF APPENDICES

Appendix A – Calaveras Ridge Regional Trail Project Emissions Memorandum, ECORP Consulting, Inc. August 2024

Appendix B – *Biological Resources Assessment for the Calaveras Ridge Regional Trail Project*, ECORP Consulting, Inc. December 2024

Appendix C – **CONFIDENTIAL REPORT** *Cultural Resources Assessment for the Calaveras Ridge Trail Burton Ridge Vicinity Project, Lafayette, Contra Costa County, California*, Rincon Consultants, Inc. October 3, 2024

Appendix D – Calaveras Ridge Regional Trail Project Energy Consumption Memorandum, ECORP Consulting, Inc. August 2024

Appendix E – Calaveras Ridge Regional Trail Project Noise Memorandum, ECORP Consulting, Inc. 2024

Appendix F – East Bay Regional Parks District, 01 51 16 Temporary Fire Protection Measures

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