January 2026 | Initial Study / Mitigated Negative Declaration

NORTH POINT ISABEL PARK CAP RESILIENCE PROJECT

East Bay Regional Park District

Prepared for:

East Bay Regional Park District
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ENVIRONMENTAL CHECKLIST

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed 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 proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

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

☐ I find that although the proposed 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 proposed project, nothing further is required.

Neoma Lavalle	January 27, 2026
Signature of Lead Agency Representative	Date
Neoma Lavalle, Planning Manager	East Bay Regional Park District
Printed Name	Agency

1. INTRODUCTION

1.1 Purpose and Scope

Pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code Sections 21000 et seq.) and the Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines) (California Code of Regulations, Title 14, Sections 15000 et seq.), as amended, this Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared to identify the potential environmental impacts associated with the repair and restoration of the landfill cap that covers a landfill at North Point Isabel, a 17-acre area of Point Isabel Regional Shoreline in Richmond, California, and the installation of park amenities and landscape improvements (herein referred to as the proposed project). This IS/MND evaluates each of the environmental issues listed in Section 5, *Environmental Evaluation*. The objective of this IS/MND is to inform the East Bay Regional Park District (District), representatives of other affected/responsible agencies, and other interested parties of the potential environmental effects that may be associated with the development and operation of the proposed project and to recommend mitigation measures, when required by CEQA, to reduce potentially significant environmental impacts.

Pursuant to the provisions of CEQA and the State CEQA Guidelines, the East Bay Regional Park District is the Lead Agency and is charged with the responsibility of deciding whether or not to approve the proposed project.

1.2 Findings of this Mitigated Negative Declaration

This IS/MND is based on an environmental checklist, as suggested in Section 15063(d)(3) of the State CEQA Guidelines, as amended and provided in Section 3, *Environmental Evaluation*. Section 3 includes a series of questions about the proposed project for each of the listed environmental topics. The environmental checklist evaluates whether there would be significant environmental effects associated with the development of the proposed project and provides mitigation measures, when required, to reduce impacts to a less than significant level. An explanation for each answer is also included in Section 3.

The IS/MND reviews the potential environmental effects of the proposed project for each of the following areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources

- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire
- Mandatory Findings of Significance

As identified through the analysis presented in this IS/MND, the proposed project would have no impact or a less-than-significant impact without mitigation for all environmental topics except the following:

- **Biological resources.** The proposed project could result in potentially significant impacts to biological resources. Implementation of Mitigation Measure BIO-1 through Mitigation Measure BIO-9 would reduce impacts to a less-than-significant level.
- **Cultural resources.** The proposed project could result in potentially significant impacts to cultural resources. Implementation of Mitigation Measures CUL-1 and CUL-2 would reduce impacts to a less-than-significant level.
- **Geology and soils.** The proposed project could result in a potentially significant impact to paleontological resources. Implementation of Mitigation Measure GEO-1 would reduce this impact to a less-than-significant level.
- **Tribal cultural resources.** The proposed project could result in a potentially significant impact to tribal cultural resources. Implementation of Mitigation Measure TCR-1 would reduce this impact to a less-than-significant level.

1.3 Contact Person

The Lead Agency for the proposed project is the East Bay Regional Park District. Any questions about the preparation of the IS/MND, its assumptions, or its conclusions should be referred to the following:

Kim Thai, Senior Planner
East Bay Regional Park District
2950 Peralta Oaks Court
Oakland, California 94605
(510) 544-2320

2. PROJECT DESCRIPTION

2.1 Project Location and Setting

Point Isabel Regional Shoreline is part of the State of California's McLaughlin Eastshore State Park and is operated by the East Bay Regional Park District (see Figure 1, *Point Isabel Regional Shoreline Cap Resilience Project Regional Setting*). The Eastshore State Park encompasses approximately 2,262 acres of tideland and upland area and extends roughly 8.5 miles along the shore of the San Francisco Bay, from the Bay Bridge in Oakland north to the Marina Bay neighborhood in the City of Richmond (California State Parks and Recreation 2002).

This project site was identified as being vulnerable to tidal inundation and storm flooding in the District's Sea Level Rise Risk Assessment and Prioritization Plan (EBRPD 2021). North Point Isabel Regional Shoreline's bayside perimeter trail is particularly vulnerable to storm flooding with its earthen levee currently residing at around 13 feet above mean sea level (amsl).

The City of Richmond General Plan land use designation and zoning for the project site is Open Space. The area surrounding the project site is currently characterized by the Richmond Inner Harbor/San Francisco Bay to the north and west, and open space to the east and south.

Point Isabel is a designated off-leash dog use area, and use of this area has expanded north to a portion of the park informally known as North Point Isabel (herein referred to as the project site). Prior to acquisition by California State Parks / East Bay Regional Park District, the project site was used as a dumping ground for construction/demolition and industrial waste. The man-made fill was limited to dumping on the ground. No natural landforms were used for placement of the waste at the project site. The project site became known as the Battery Point due to a large quantity of battery casings that were buried at the project site during the 1950s and 1960s (EKI Environmental & Water 2018). The project site became the subject of an environmental cleanup in the 1980s under Abatement Order Number 84-006 from the Regional Water Quality Control Board-San Francisco Bay (RWQCB) (Regional Water Quality Control Board-San Francisco Bay 1984). The cleanup effort involved preparation and implementation of a Remedial Action Plan (RAP) that required removal of battery casings and lead-impacted soils that were then disposed of off-site, construction of a clay cap over the landfill, and long-term monitoring of the shoreline and cap, with maintenance as required (EKI Environmental & Water 2018). Ongoing monitoring requirements for the project site were identified in Abatement Order Number 87-14.

Source: Tetra Tech.

Figure 1
North Point Isabel Regional Shoreline Cap Resilience Project Regional Setting

Since that time, annual inspections by the RWQCB have indicated that the landfill cap is eroding. Lead-contaminated soils have been detected in the perimeter drainage ditch, Hoffman Channel, and other areas and are likely discharging with stormwater into the San Francisco Bay. The RWQCB issued a Site Cleanup Requirement Order Number 98-072 in 1998 requiring repair of the degraded landfill cap.

2.2 Proposed Project

Through a funding partnership with California State Parks, the proposed project seeks to beautify and improve the project site's resilience to sea level rise by enhancing the existing remedial cap to provide long-term, sustainable recreational use of the park through effective grading, drainage, and planting to prevent soil erosion. The proposed project has five primary goals:

- Provide sea level rise resilience by raising the site's elevation with import soils and increased rock slope protection along the shoreline.
- Effectively stabilize the cap by raising the site's elevation above pre-existing classified soils. Install a new paved and gravel trail network to provide universal site access.
- Grade planted slopes and install a continuous vegetated swale to reduce soil erosion and filter sediments from site-generated stormwater before discharge into the San Francisco Bay.
- Provide more site furnishings to enhance and improve the user experience of the large off-leash dog use area.
- Install resource protection fencing to prevent dogs from reaching shorebirds in the adjacent mudflats.

2.2.1 Construction

For the sea level rise resilience/shoreline stabilization design, the District's consulting engineers considered improvements based on projections for the year 2050 and 2100. The projections for each year according to the State of California's Sea-Level Guidance document (2018) are listed in Table 1, *Sea Level Rise Scenarios*.

Table 1 Sea Level Rise Scenarios

Year	Risk/Emissions	Sea Level Rise
2050	Low Risk	1.1
2050	High Risk	1.9
2100	Low Risk, Low Emissions	2.4
2100	Low Risk, High Emissions	3.4
2100	High Risk, Low Emissions	5.7
2100	High Risk, High Emissions	6.9

Source: State of California 2018.

The project's design criteria used the 2100 projections to calculate various projected heights of the proposed project. Specifically, the High Risk, Low Emissions projection was used for the increase in the height of the slope rock protection (5.7 feet amsl) and the High Risk, High Emissions projection was used for the increased elevation of the perimeter trail (6.9 feet amsl) plus the added King Tide Water of 7.4 (totaling 13.1 and 14.3 amsl). To accomplish these elevations, the proposed project would add soils to increase the elevation of the perimeter trail by 1.5 to 2 feet above the 14.3 amsl elevation and rip rap to increase the rock slope protection above 13.1 amsl.

The effort to protect against sea level rise would bring approximately 72,500 cubic yards of new fill and 26,500 square feet of rip rap to the project site to be placed on top of the existing soil surfaces and rocked slopes to raise the elevation of the perimeter trail and the rock slope protection.

To remediate the degraded landfill cap, a geomembrane liner would be installed under the new perimeter trail and swale to encapsulate the previously placed lead-impacted soils beneath the cap. The geomembrane would also be installed under locations where new rip rap is placed over the new fill. During placement of the new fill, the surface of the landfill would be graded for erosion control and to improve drainage to existing stormwater flow catch basins.

Construction equipment associated with the proposed project could include a paver, roller, flatbed truck, front end loader, dump truck, backhoe, grader, and compactor. In addition, construction of the proposed project would result in up to 80 haul truck trips per day for up to 110 days. The anticipated total construction duration of the proposed project ranges from 6 to 24 months depending on soil source availability and weather. Ideally, construction activities would take place outside of avian nesting season.

During construction, perimeter trails would be reconstructed and/or repaved to reduce erosion and improve stormwater drainage off the cap and into existing stormwater flow catch basins. Construction activity would be conducted within the existing trail width and would not encroach on open space parkland. Stormwater runoff would be directed into vegetated swales prior to being discharged from the project site into the local stormwater management system. Figure 2, *North Point Isabel Cap Resilience Project Construction Elements*, provides details for the rise in elevation of the project site surface that would result from the proposed cap improvement as well as stormwater management features.

Construction vehicles and equipment would access the project site from the southeastern entrance point using Rydin Road. Equipment would cross Hoffman Channel using the existing bridge. During construction, equipment could be staged at the project site or to the west of the project site across Hoffman Channel Bridge on the northern edge of the parking lot, as shown in Figure 1, *Point Isabel Regional Shoreline Cap Resilience Project Regional Setting*. The potential construction staging area could be used for a variety of things, including parking, equipment, and vehicle storage.

2.2.2 Park Amenities and Landscape Improvements

Once the project's final elevation and shoreline armoring are complete, park amenities for the beautification and enhanced use of the site as an off-leash dog use area would be installed. Access to the project site would be provided in the southeastern and northeastern corners and would include a paved perimeter trail and interior compacted gravel trails, as shown in Figure 3, *North Point Isabel Cap Resilience Project Amenities*. Vista seating and viewing areas that would include site furnishings would be created at focal points across the project site, as shown in Figure 3. Log and boulder clusters would be placed in two locations within the interior of the project site. The surface of the cap would be contoured to provide more aesthetic appeal to park users.

Landscaping of the project site would be used to enhance the aesthetics once the cap has been constructed and while park amenities are being installed. Native plants would be used for the landscaped elements and chosen for their ability to grow in a nonirrigated, coastal environment. Plants would be selected with shallow-growing root systems to prevent interference with the geomembrane and for their capability to withstand heavy dog traffic and deer browsing. A natural grass turf would be hydroseeded on the surface of the project site between interior trails, as shown in Figure 3.

Source: Tetra Tech.

Figure 2
North Point Isabel Cap Improvement Project Construction Elements

Source: East Bay Regional Park District 2023.

Figure 3
North Point Isabel Cap Resilience Project Amenities

2.2.3 Operations

Once the sea level rise resilience activities and installation of park amenities and landscape improvements are complete, the Project Site would resume operation as a park. Routine landscaping maintenance and repairs to the off-leash dog use area would be conducted by the East Bay Regional Park District.

2.3 Project Approvals

This IS/MND will be used by the East Bay Regional Park District Board of Directors, the CEQA Lead Agency, in its consideration of whether to approve the proposed project. If approved, this IS/MND would be used by the East Bay Regional Park District when seeking various approvals and permits. The following approvals and permits may be required prior to implementation of the proposed project:

- City of Richmond Grading Permit
- Bay Coastal Development Commission Permit
- Stormwater Pollution Prevention Plan

In addition, the District has engaged in informal consultation with the San Francisco Regional Water Quality Control Board as part of the design of the proposed project. The design of the proposed project is anticipated to be acceptable to the San Francisco Regional Water Quality Control Board.

3. ENVIRONMENTAL EVALUATION

This section contains the environmental checklist for the proposed project. The checklist is marked with findings as to the environmental effects of the proposed project.

This analysis has been undertaken pursuant to the provisions of CEQA, as amended, to provide the East Bay Regional Park District with the factual basis for determining, based on the information available, the form of environmental documentation the proposed project warrants. The basis for each of the findings listed in the form is explained under the "Explanation of Checklist Answers" heading following each section of the checklist.

ENVIRONMENTAL CHECKLIST FORM

East Bay Regional Park District **2950 Peralta Oaks Court** **Oakland, California 94605**	
Project Title	North Point Isabel Cap Resilience Project
Lead Agency Name and Address	East Bay Regional Park District
Contact Person and Phone Number	Kim Thai (510) 544-2320
Project Location	Richmond, California
Project Sponsor's Name and Address	East Bay Regional Park District 2950 Peralta Oaks Court Oakland, California 94605
General Plan Designation	Open Space
Zoning Designation	Open Space (OS)
Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?	No

Project Best Management Practices

The following BMPs would be implemented as part of the proposed project during cap remediation activities to reduce project-related impacts to adjacent areas, maintain worker safety, minimize impacts from hazardous materials spills, maintain emergency access, protect water quality, natural resources, and prevent fires.

Construction BMPs

1. All construction activities for remediating the landfill cap shall be done from an upland position. No work shall originate from the San Francisco Bay.

2. No construction equipment is expected to be operated below the high tide line, and no construction shall occur below the high tide line in Hoffman Channel.

3. No construction shall occur within 50 feet of suitable Salt Harvest Mouse habitat during any extreme high tide events (defined as exceeding mean higher high water elevation by over 1.5 feet).

4. The San Francisco Bay Trail shall remain open as much as possible during construction, and orange construction fencing shall be installed on either side of the trail. Temporary closure of the trail during peak material delivery periods may occur and shall be publicized in advance along with detour plans. Trail users may occasionally be temporarily stopped by a flagman to allow construction vehicle access to the project site. Pedestrian notices and caution signs shall be installed.

5. Hazardous materials used for construction shall not be stored or used where they could affect nearby properties or where they might enter Hoffman Channel, the San Francisco Bay, or the local stormwater management system.

6. The construction contractor shall prepare and implement a spill prevention and control plan to minimize the chance of spilling hazardous materials used during construction operations. Spill kits shall be present for any work adjacent to open waters. All spills of oil and other hazardous materials shall be immediately cleaned up and contained. Any hazardous materials cleaned up or used on-site shall be properly disposed of at an approved disposal facility.

7. The project shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) to limit erosion and protect water quality surrounding the project site.

8. The construction contractor shall implement erosion control measures as described in the SWPPP, such as silt fencing in areas of ground disturbance.

9. Construction workers associated with the earthwork movement portion of the project shall be trained and current with Hazardous Waste Operations and Emergency Response (HAZWOPER) standards for general industry (29 CFR 1910.120) and construction (29 CFR 126.65).

10. The construction contractor and all subcontractors shall prepare a project-specific Health and Safety Plan. The Health and Safety Plan shall include an air quality monitoring plan that includes lead.

11. Any materials removed during site preparation and determined to be unsuitable for re-use shall be disposed of off-site according to current laws and regulations. If materials are characterized as hazardous waste, a hazardous materials license contractor and transporter shall handle and transport the materials to a disposal facility permitted to receive the waste, in accordance with California laws.

Air Quality BMPs

The Bay Area Air District (Air District) recommends BMPs to ensure minimal impacts on regional air quality. The contractor shall be responsible for implementing the following BMPs during construction:

1. All exposed soil surfaces (e.g., parking areas, staging areas, soil piles, graded areas) shall be watered as needed.

2. All haul trucks transporting cap material on-site and from off-site sources shall be covered.

3. All visible mud or dirt tracked out onto adjacent public roads or the San Francisco Bay Trail shall be removed using a street sweeper at least once per day or as needed.

4. Idling times of construction equipment shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure in 13 CCR Section 2485).

5. Clear signage shall be provided for construction workers at all access points.

6. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specification.

7. A publicly visible sign with the telephone number and person to contact at the East Bay Regional Park District regarding any dust complaints shall be posted in or near the project site. The contact person will respond to complaints and take corrective action within 48 hours. The Air District phone number shall also be visible to ensure compliance with applicable air quality regulations.

Noise BMPs

The contractor shall implement the following noise BMPs during construction to ensure minimal impacts on adjacent park users.

1. Construction hours shall be clearly posted on a sign at the entrance to the construction site.

2. Land uses adjacent to the construction site shall be notified of the construction schedule in writing. The East Bay Regional Park District construction manager shall be responsible for responding to any noise complaints and a contact telephone number shall be posted at the construction site.

3. All equipment used on-site shall be muffled and maintained. All internal combustion engine-driven equipment shall be fitted with mufflers that are in good condition.

4. Unnecessary idling of internal combustion engines shall be prohibited, and all equipment shall be turned off when not in use.

5. Quiet construction equipment, particularly air compressors, shall be selected whenever possible. Motorized equipment shall be fitted with proper mufflers in good working order and appropriate for the equipment.

6. Heavy equipment, such as paving and grading equipment, shall be stored on-site to minimize the need for extra heavy truck trips on local streets.

7. The contractor shall minimize the use of vehicle backup alarms. A common approach to minimizing the use of backup alarms is to design the construction site with a circular flow pattern that minimizes backing up of trucks and other heavy equipment.

3.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less-than-Significant Impact 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?				X
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?			X	
d) Create a new source of substantial light or glare that will adversely affect day or nighttime views in the area?				X

References: California Department of Conservation 2023.

3.1.1 Environmental Setting

The project site is located along the eastern edge of the San Francisco Bay in the City of Richmond, along the Point Isabel Regional Shoreline. The project site provides views of the San Francisco Bay, the Golden Gate Bridge, and surrounding hills. The San Francisco Bay Trail runs along the eastern boundary of the project site and can be accessed from the northeastern corner of the project site. Hoffman Marsh, a preservation area, is located northeast of the San Francisco Bay Trail and the project site.

Based on a review of the California Department of Transportation Scenic Highway Mapping Program, the project site is not located within a viewing corridor of a State-designated scenic highway (California Department of Conservation, 2023). The closest highway that is eligible for designation as a scenic highway is a portion of Interstate 580 (I-580) adjacent to Golden Gate Fields and approximately 1.3 miles southeast of the project site.

3.1.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

The project site offers high-quality views of the San Francisco Bay, the Golden Gate Bridge, and surrounding hills that are considered scenic vistas. The proposed project would install park amenities and landscape improvements such as vista seating and viewing areas that would be beneficial improvements to existing scenic vistas. However, during construction, construction equipment would be visible from adjacent areas. Construction equipment would be temporarily staged on-site but would be parked as far back from the shoreline and San Francisco Bay Trail as possible. Construction activity would be temporarily visible from the San Francisco Bay and adjacent areas. Once construction is complete, the project site would resume its existing use as a park with enhanced features. Any adverse effect on a scenic vista would be temporary and the proposed project would not have a substantial adverse effect on a scenic vista. Therefore, a **less-than-significant impact** would occur.

B) NO IMPACT

The project site is not located within a viewing corridor of a designated State scenic highway. Additionally, no rock outcroppings, trees, or historic buildings are present at the project site. Therefore, the proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway, and **no impact** would occur.

C) LESS-THAN-SIGNIFICANT IMPACT

An “urbanized area,” as defined by CEQA Section 21071, is an incorporated city that either has a population of at least 100,000 persons, or a population of 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons. The project site is in the City of Richmond, which has a population of over 116,000 and is adjacent to another incorporated city (United States Census Bureau 2020). Thus, this impact analysis addresses whether, for an urbanized area, the proposed project would conflict with applicable zoning and other regulations governing scenic quality.

The project site is within the East Bay Regional Park District boundaries and therefore is within the East Bay Regional Park District’s jurisdiction. Due to this, the proposed project is not subject to the City of Richmond’s land use and zoning designations. The East Bay Regional Park has a Master Plan that was adopted in 2013 that establishes regional parkland classifications. Each classification has a distinct purpose and sets forth the minimum standards that an area must have to be considered part of the regional park system (EBRP 2013). The project site is classified as a Regional Shoreline in the 2013 Master Plan, which is defined in the 2013 Master Plan as an area that must contain a variety of natural environments and manageable units of tidal, near shore wetland and upland areas that can be used for scientific, interpretive, or environmental purposes (EBRP 2013). The project site is currently used as a park and is consistent with the description of a regional shoreline, and would resume operation as a park after the proposed remediation process and installation of park amenities and landscape improvements. As detailed in Section 3.11, *Land Use and Planning*, the proposed project would be consistent with the policies of the East Bay Regional Park District Master Plan, including those related to scenic quality. Therefore, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality and a **less-than-significant impact** would occur.

D) NO IMPACT

The proposed remediation process and installation of park amenities and landscape improvements would not include the use of reflective building materials. No nighttime construction would occur. The proposed project does not involve installation of exterior lighting sources. Therefore, the proposed project would not create a new source of substantial light or glare that will adversely affect day or nighttime views in the area, and **no impact** would occur.

3.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and project site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agricultural farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

Would the project:	**Potentially Significant Impact**	**Less-than-Significant Impact 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))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
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?				**X**

References: California Department of Conservation 2022.

3.2.1 Environmental Setting

The project site has a zoning designation of Open Space. No lands under agricultural practices or Williamson Act contracts are located at the project site or in immediate areas to the project site. No forest lands are present at the project site. The California Important Farmland Finder managed by the California Department of Conservation classifies the project site as Other Land and immediate areas to the project site as Other Land or Urban and Built-Up Land (California Department of Conservation 2022). Other lands include low-density, rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry, or aquaculture facilities; strip mines or borrow pits; water bodies smaller than 40 acres; and vacant and nonagricultural land surrounded by urban development and greater than 40 acres. Urban and Built-Up land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel, and includes residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures.

3.2.2 Explanation of Checklist Answers

A) NO IMPACT

The project site is classified by the California Department of Conservation as Other Land. Therefore, the proposed project would not convert farmland to non-agricultural use, and **no impact** would occur.

B) NO IMPACT

The City of Richmond zones the project site as Open Space and the project site is not under a Williamson Act Contract. Therefore, the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract, and **no impact** would occur.

C) NO IMPACT

The City of Richmond zones the project site as Open Space and the project site does not consist of any forest land, timberland, or timberland zoned Timberland Production. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production, and **no impact** would occur.

D) NO IMPACT

No forest lands are present at the project site. Therefore, the proposed project would not result in the loss of forest land or conversion of forest land to non-forest use, and **no impact** would occur.

E) NO IMPACT

The project site is classified as Other Land and does not consist of any forest land. Therefore, the proposed project would not 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, and **no impact** would occur.

3.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

References: Bay Area Air District 2017; California Air Pollution Control Officers Association 2022; California Air Resources Board 2022b.

3.3.1 Environmental Setting

Pursuant to the Clean Air Act Amendments of 1990, the United States Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. The NAAQS are classified as primary and secondary standards. Primary standards prescribe the maximum permissible concentration in the ambient air and are required to protect public health. Secondary standards specify levels of air quality required to protect public welfare, including materials, soils, vegetation, and wildlife, from any known or anticipated adverse effects. NAAQS are established for six pollutants (known as criteria pollutants): ozone (O_3), particle pollution (i.e., respirable particulate matter less than 10 microns in diameter [PM_{10}] and respirable particulate matter less than 2.5 microns in diameter [$PM_{2.5}$]), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). The California Air Resources Board (CARB) has also established its own air quality standards in the state of California, known as the California Ambient Air Quality Standards (CAAQS). The CAAQS are generally more stringent than the NAAQS and include air quality standards for all the criteria pollutants listed under NAAQS plus sulfates (SO_4), hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particulate matter.

The EPA classifies the air quality within an Air Quality Control Region with regard to its attainment of federal primary and secondary NAAQS. An area with air quality better than the NAAQS for a specific pollutant is designated as being in attainment for that pollutant. Any area not meeting the NAAQS is classified as a nonattainment area. Where there is a lack of data for the EPA to make a determination regarding attainment or nonattainment, the area is designated as unclassified and is treated as an attainment area until proven otherwise. Similarly, CARB makes state area designations for the state criteria pollutants.

The project site is in the City of Richmond, which is part of Contra Costa County and is subject to Air District regulations. Pollutant concentrations within Contra Costa County are assessed relative to both the federal and State ambient air quality standards. Contra Costa County is in attainment for all State criteria pollutants except for O_3, $PM_{2.5}$, and PM_{10} and in attainment for all federal criteria except O_3 and $PM_{2.5}$ (California Air Resources Board 2022b). Applicable Air District rules are presented in Table 2, *Applicable Rules*.

Table 2 Applicable Rules

Rule	Title	Purpose
Regulation 6, Rule 1	General Requirements	Limits the quantity of particulate matter in the atmosphere through the establishment of limitations on emission rates, emission concentrations, visible emissions and opacity.
Regulation 7	Odorous Substances	Places general limitations on odorous substances and specific emission limitations on certain odorous compounds. The limitations of this regulation are not applicable until the Air Pollution Control Officer 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.

The Air District also prepares and updates air quality plans to attain national and State ambient air quality standards, comply with national and State air quality requirements, and protect air quality in the Bay Area. The most current air quality plan for the Bay Area is the 2017 Bay Area Clean Air Plan (Bay Area Air District 2017). The Clean Air Plan incorporates the Air District's regulatory and permitting framework as well as general plans and regional plans for its implementation. Thus, a project that is consistent with the general plan of the geographic area where it is located is consistent with the Clean Air Plan.

Additionally, the Air District has established thresholds of significance for criteria pollutant emissions and criteria air pollutant precursors. Projects with emissions below established thresholds are not expected to generate sufficient criteria air pollutant emissions to violate any air quality plans or contribute substantially to an existing or projected air quality violation and would therefore have a less-than-significant impact on air quality. Projects with emissions equal to or exceeding the established significance threshold would have a potentially significant adverse impact on air quality unless mitigation measures are implemented. A summary of the Air District air quality thresholds of significance is presented in Table 3, *Air District Thresholds of Significance for Criteria Pollutants*.

Table 3 Air District Thresholds of Significance for Criteria Pollutants

Pollutant	Construction Pounds per Day	Operation Pounds per Day/ Tons per Year
NOx	54	54/10
ROG	54	54/10
PM_{10}	82 (exhaust only)	82/15
$PM_{2.5}$	54 (exhaust only)	54/10
PM_{10}/$PM_{2.5}$ (fugitive dust)	Best Management Practices	None
Local CO	None	9.0 ppm (8-hour average), 20.0 ppm (1-hour average)
Odors	None	Complaint History – Five confirmed complaints per year averaged over three years.
Risk and Hazards	Compliance with Qualified Community Risk Reduction Plan or Increased Cancer Risk of >10.0 in a million Increased non-cancer risk of >1.0 Hazard Index (Chronic or Acute) Ambient $PM_{2.5}$ increase: >0.3 µg/m^3 annual average. Zone of Influence: 1,000-foot radius from fence line of source or receptor	

The nearest possible sensitive receptor to the project site is a commercial development approximately 1,200 feet east of the project site's fence line.

3.3.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

The project site is currently used as a park and would resume operation as a park after the proposed remediation process and installation of park amenities and landscape improvements. Thus, land use of the project site would not be changed by the proposed project and would remain consistent with the Clean Air Plan. Therefore, the proposed project would not conflict with or obstruct the implementation an applicable air quality plan and a **less-than-significant impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

The proposed project would add new emissions of criteria pollutants only on a temporary basis during construction. The construction emissions were calculated using California Emissions Estimator Model (CalEEMod), which is widely accepted to provide a uniform platform to estimate potential emissions resulting from construction and operation activities of land use projects in California (California Air Pollution Control Officers Association, 2022). CalEEMod takes user-entered data and preprogrammed algorithms designed to take information such as project size and length; vehicle types, operating hours, and trip lengths; and emissions mitigation criteria to calculate emissions of criteria pollutants and greenhouse gases (GHGs). To determine the significant effects of the proposed project on the environment, construction emissions were compared against the thresholds of significance established by the Air District. A summary of the proposed project's construction emissions, comparison with the Air District thresholds of significance, and significance determination is presented in Table 4, *Project Construction Average Daily Emissions*. A summary of assumptions used and detailed emission calculations is included as Appendix A, *CalEEMod Air Emissions and Greenhouse Gas Emissions Calculations*.

Table 4 Project Construction Average Daily Emissions

Calendar Year	**VOCs**	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
2024 (Average Daily Maximum in lb/day)	0.185	3.587	8.1374	0.3886	0.3004
Threshold of Significance (lb/day)	54	54	None	82	54
Exceeds threshold?	**No**	**No**	**No**	**No**	**No**

Notes: CO = carbon monoxide
lb/day = pounds per day
Nox= oxides of nitrogen (nitric oxide and nitrogen dioxide)
PM_{10} = respirable particulate matter less than 10 microns in diameter
$PM_{2.5}$ = respirable particulate matter less than 2.5 microns in diameter
VOC = volatile organic compounds (reported as reactive organic gases)

As presented in Table 4, while construction of the proposed project would result in emissions of criteria pollutants that would add to emissions released by other projects or sources in the region, the proposed project emissions are significantly below the Air District thresholds of significance. Once construction is complete, the project site would resume its existing use as a park and would not directly generate any emissions. Therefore, the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard, and a **less-than-significant impact** would occur.

C) LESS-THAN-SIGNIFICANT IMPACT

The proposed project would generate temporary emissions during construction activities associated with the remediation process and installation of park amenities and landscape improvements. The project site would be closed to the public and fenced off during construction activities. Once construction is complete, the project site would resume its existing use as a park. As described in Section 3.17, *Transportation*, operation of the proposed project would not result in new vehicle trips to and from the project site. No new operational emissions would be generated, as the proposed project would not introduce new sources of air pollutants or sensitive receptors to the project site. Additionally, the Air District threshold defines the zone of influence for sensitive receptors as a 1,000-foot radius from the fence line of source or receptor. The nearest possible sensitive receptor to the project site is a commercial development approximately 1,200 feet east of the project site's fence line. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. A **less-than-significant impact** would occur.

D) LESS-THAN-SIGNIFICANT IMPACT

Temporary and intermittent odors may result from combustion of diesel-fueled construction equipment during construction. However, noxious odors would be confined to the immediate vicinity of the construction equipment. Due to the distance between the project site and the nearest sensitive receptor, by the time such emissions reach any sensitive receptors, they would be diluted to well below any level of air quality concern. Once construction is complete, the project site would resume its existing use as a park and would not generate any odors. Therefore, the proposed project would not result in other emissions adversely affecting a substantial number of people and a **less-than-significant impact** would occur.

3.4 Biological Resources

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified in local or regional plans, policies, or regulations, or by the		X		

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		**X**		
c) Have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		**X**		
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?		**X**		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			**X**	
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?				**X**

References: Contra Costa County 2005; California Native Plant Society 2023; California Natural Diversity Database 2023.

3.4.1 Environmental Setting

A Biological Resource Assessment was prepared by Nomad Ecology in July 2024 (see Appendix D, *Biological Resource Assessment*). The study area for the Biological Resource Assessment comprises approximately 25.2 acres and consists of a 50-foot buffer on the project impact areas, including a large project site on North Point Isabel and a potential construction staging area and two construction access routes on Point Isabel proper. The majority of the study area is on artificial fill, so all vegetation communities observed and described below are considered disturbed and of anthropogenic origin to some degree, even if some are naturally recruiting and expanding at this point. Additionally, no federally or State-listed or California rare plant species were considered to have the potential to occur within the study area. In addition, the Biological Resources Assessment considered special-status animal species in the project vicinity from the California Natural Diversity Database. A total of 84 special-status fish and wildlife species were considered as part of the Biological Resource Assessment.

SENSITIVE HABITATS

Habitats such as wetlands or riparian areas are considered sensitive biological communities that fulfill special biological functions. These habitats are protected under federal regulations such as the Clean Water Act as well as State regulations such as the Porter-Cologne Act managed by the RWQCB and the California Department of Fish and Game Code managed by the California Department of Fish and Wildlife (CDFW) under the Streambed Alteration Program. In addition, the McAteer-Petris Act created the San Francisco Bay Conservation and Development Commission, which guides future developments for protection of natural resources and shoreline of the San Francisco Bay. Finally, CEQA, local ordinances or policies, Special Habitat Management Areas, and General Plans provide regulations or guidelines for protecting sensitive biological communities.

The Biological Resource Assessment identifies that one sensitive natural community currently recognized by CDFW was observed within the study area: *Salicornia pacifica* Herbaceous Alliance (pickleweed mats). Tidal marshes were also identified in the Biological Resources Assessment within the project buffer zone and adjacent to the study area in Hoffman Marsh.

SPECIAL-STATUS PLANTS

The Biological Resource Assessment identifies that, though 101 special-status plant species are known to occur in the project vicinity, no special-status plant species have the potential to occur within the study area due to lack of suitable habitat, including vernal pools, playas, coastal dunes, cismontane woodland, coniferous forest, chaparral, and/or serpentine soils. Species were also ruled out due to the high level of anthropogenic disturbance, lack of appropriate elevation ranges, and distributional limits.

SPECIAL-STATUS WILDLIFE

The Biological Resource Assessment identifies that, of the 84 special-status fish and wildlife species considered as part of the assessment, 9 have potential to occur within the study area and could be affected by the proposed project. These include 2 special-status invertebrates, 4 special-status bird species, and 1 special-status mammal species.

3.4.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

This evaluation focuses on special-status species with the potential to be adversely affected by the proposed project, as identified in the Biological Resources Assessment (see Appendix D).

Special-Status Bumble Bees

Grading or any other ground-disturbing activities associated with the project could damage or destroy underground nests of Obscure bumble bee and Crotch bumble bee. Project activities could also cover the entrances to underground nests with fill material or damage them with vehicles. These impacts are potentially significant. Impacts to special-status bumble bee species potentially occurring on-site will be reduced to a **less-than-significant impact with mitigation** through implementation of **Mitigation Measure BIO-1** (Worker Environmental Awareness Training), **Mitigation Measure BIO-7** (Bumble Bee Mitigation), and **Mitigation Measure BIO-9** (Biological Monitoring).

Chinook Salmon, Green Sturgeon, and White Sturgeon

Project construction activities would be confined to upland areas and therefore the project would not have any direct impacts on Chinook salmon, green sturgeon, white sturgeon, or their habitat. However, indirect impacts to these species could occur during construction if sediment from the project site is transported (e.g., via wind or rain) into adjacent aquatic habitats. This could degrade habitat by temporarily increasing turbidity in waters within and adjacent to the study area. This potentially significant impact would be reduced to a **less-than-significant impact with mitigation** through implementation of the project's BMPs and **Mitigation Measure BIO-9** (Biological Monitoring). The project would provide a long-term indirect benefit to Chinook salmon, green sturgeon, and white sturgeon by preventing lead-contaminated soils from discharging into Hoffman Channel and the San Francisco Bay.

Burrowing Owl

The project could result in the temporary loss of potential foraging habitat for burrowing owls that use the study area for overwintering. Direct impacts to burrows used by burrowing owls are not anticipated because the owls burrow in the rip rap, which will not be affected by construction activities. The wintering burrowing owls in the study area are acclimated to human activity (and noise) in the vicinity of their burrows. However, construction equipment and sustained human activity during construction in the vicinity of burrows may constitute a novel source of disturbance to the owls. This could indirectly impact burrowing owls and either cause them to flush from their burrows or abandon the burrows completely, which could make the owls more susceptible to predation or force them into lower-quality habitat. This impact would be potentially significant, but would be reduced to a **less-than-significant impact with mitigation** through implementation of **Mitigation Measure BIO-1** (Worker Environmental

Awareness Training), **Mitigation Measure BIO-5** (Burrowing Owl Mitigation), and **Mitigation Measure BIO-9** (Biological Monitoring).

Northern Harrier and Alameda Song Sparrow

The project would not have any direct impacts on the northern harrier or the Alameda song sparrow because no construction activities will occur in areas containing potential nesting habitat for either species. However, noise and human activity associated with construction of the project could interfere with reproductive efforts or cause the northern harrier and Alameda song sparrows to abandon their nests if any nests are in portions of Hoffman Marsh near the study area. This indirect impact is potentially significant, but would be reduced to a **less-than-significant impact with mitigation** through implementation of **Mitigation Measure BIO-1** (Worker Environmental Awareness Training), **Mitigation Measure BIO-4** (Nesting Bird Mitigation), **Mitigation Measure BIO-8** (Hoffman Marsh), and **Mitigation Measure BIO-9** (Biological Monitoring).

California Ridgway's Rail

The project would not have any direct impacts on habitat for the California Ridgway's rail because no construction-related ground disturbance or vehicle activities would occur in salt marsh habitat or the marsh-upland ecotone. During extreme high tide events, rails could seek cover in the vicinity of the San Francisco Bay Trail (a short segment of which will be used as an access route for construction vehicles). If this occurs, construction vehicles could strike rails or cause them to flush from cover, making them more susceptible to predation. This potentially significant impact would be reduced to a **less-than-significant impact with mitigation** through implementation of **Mitigation Measure BIO-6** (California Ridgway's Rail and Salt Marsh Harvest Mouse Mitigation).

Ridgway's rails vary in their sensitivity to human disturbance, both individually and between marshes. Ridgway's rails have been documented nesting in areas with high levels of disturbance, including areas adjacent to trails, levees, and roads heavily used by pedestrian and vehicular traffic. In contrast, direct human-caused disturbance is known to occur at some locations. For example, Albertson (1995) documented a rail abandoning its territory shortly after a repair crew worked on a nearby transmission tower. California Ridgway's rail reactions to disturbance may vary with season; however, both breeding and nonbreeding seasons are critical times. During the breeding season, human disturbance primarily affects survival of eggs and chicks; during the nonbreeding season (winter), disturbance may cause adult mortality, particularly during high tide and storm events when rails are most vulnerable to predators.

The USFWS has determined that noise and human activities within 700 feet of a Ridgway's rail nest (or activity center of a vocalizing rail) could impact the species. The Ridgway's rails in Hoffman Marsh appear to be relatively habituated to human activity. Although project construction activities would not occur in the early morning and late evening, when Ridgway's rails are most active (physically and vocally), noise and human activity associated with construction of the project could significantly impact rails by affecting essential breeding, foraging, or sheltering activities. These potentially significant impacts to California Ridgway's rails would be reduced to **less-than-significant impact with mitigation** through implementation of **Mitigation Measure BIO-1** (Worker Environmental Awareness Training), **Mitigation Measure BIO-2** (Delineation of Sensitive Resources), **Mitigation Measure BIO-6** (California Ridgway's Rail and Salt Marsh Harvest Mouse Mitigation), **Mitigation Measure BIO-8** (Hoffman Marsh), and **Mitigation Measure BIO-9** (Biological Monitoring). See heading "Potential Noise Impacts to Wildlife" for further discussion of potential impacts to Ridgway's rails.

Migratory Birds

Construction activities have the potential to directly affect nesting birds through trampling, vehicle strikes, and vegetation removal. Because the existing off-leash dog use area would be closed during construction of the proposed Project, there would be less human activity at the Project Site during construction when compared to existing conditions. However, human activity and noise associated with proposed Project construction could indirectly adversely affect birds, causing nest abandonment or disruption of brooding behaviors essential to viability of eggs and survival of chicks. The proposed Project's direct and indirect impacts on migratory birds are potentially significant but would be reduced to a **less-than-significant impact with mitigation** through implementation of **Mitigation Measure BIO-1** (Worker Environmental Awareness Training), **Mitigation Measure BIO-4** (Nesting Bird Mitigation), **Mitigation Measure BIO-8** (Hoffman Marsh), and **Mitigation Measure BIO-9** (Biological Monitoring).

Salt Marsh Harvest Mouse

The USFWS has issued Biological Opinions for numerous projects potentially affecting the salt marsh harvest mouse, several of which state that loud noises or the presence and movement of nearby people and heavy equipment may disturb salt marsh harvest mice by altering foraging, sheltering, and dispersal activities. While these potential effects are plausible, they have not been studied, nor is there any scientific information suggesting that noise and human activity near salt marsh harvest mouse habitat are significant threats to the species. As described above, the existing off-leash dog use area would be closed during construction of the project. As a result, human activity near marsh habitat during construction would be reduced when compared to existing conditions. For these reasons, impacts on the salt marsh harvest mouse due to noise and human activity would be less than significant.

Habitat for salt marsh harvest mice would not be directly affected by the project because there is no potential habitat for the species within the project site. However, ground-disturbing activities could result in injury or mortality of individual salt marsh harvest mice if mice are forced into the project impact area during an extreme high tide event. This potentially significant impact will be reduced to a **less-than-significant impact with mitigation** through implementation of **Mitigation Measure BIO-1** (Worker Environmental Awareness Training), **Mitigation Measure BIO-6** (California Ridgway's Rail and Salt Marsh Harvest Mouse Mitigation), **Mitigation Measure BIO-8** (Hoffman Marsh), and **Mitigation Measure BIO-9** (Biological Monitoring).

Potential Noise Impacts to Wildlife

This discussion evaluates the potential impacts to wildlife from noise. For additional details on the project's potential noise impacts, see Section 3.13, *Noise*.

The marsh vegetation in the Hoffman Marsh to the east of the project site is habitat for the California Ridgway's rail (*Rallus longirostris obsoletu*s). In 1991, the U.S. Fish and Wildlife Service (USFWS) recommended that noise levels not exceed 60 dBA to protect the gnatcatcher (*Polioptilidae*) and other bird species. While this threshold is commonly used for other endangered species, this project utilizes site-specific thresholds based on existing ambient noise levels from long-term measurements. A previous biological opinion suggested that project-related noise levels should not exceed "ambient noise level + 3 dBA" and essentially limit project-related construction noise level to the current ambient environment. Therefore, thresholds of 66 dBA L_{eq} (LT-1 and LT-2) and 60 dBA dBA L_{eq} (LT-3) are applied at measurement locations (Lt-1, LT-2, and LT-3) in Hoffman Marsh to assess noise impacts on the California Ridgway's rail off-site.

For the purposes of this analysis, thresholds based on not to exceed "ambient noise levels + 3 dBA" are used to determine impact significance at sensitive habitat receptors in the Hoffman Marsh.

The effects of noise on wildlife depend on the nature of the noise source. Chronic and frequent noise can impair an animal's sensory capabilities, thereby masking biologically relevant sounds used for communication, detection of threats or prey, and spatial navigation. Intermittent and unpredictable "impulse" noise stimuli that startle animals are perceived as threats and generate self-preservation responses such as fleeing or hiding. Most noise-related impacts appear to involve behavioral responses across four categories: (1) changes in temporal patterns, (2) alterations in spatial distributions or movements, (3) decreases in foraging or provisioning efficiency coupled with increased vigilance and anti-predator behavior, and (4) changes in mate attraction and territorial defense. These disturbance-, distraction-, and masking-mediated behavioral changes could directly affect individual survival and fitness or lead to physiological stress that may then compromise fitness. Irrespective of whether the noise is perceived as a threat or masks biologically relevant sounds, increases in noise intensity (loudness or amplitude) increase the severity of the effects.

Wildlife response to noise varies among taxa and species. For example, an impulse noise that causes a bird to flush from its nest may have no measurable effect on a reptile. Among birds, some species tolerate noisy environments and have learned to communicate by adjusting their song frequency levels, whereas other species will avoid the noisy environment altogether. Finally, there may be variance at the individual level, where some individuals tolerate the noise stimuli, but others do not.

The existing level of ambient noise is a critical variable in the effect that additional anthropogenic noise has on wildlife. In its analysis of the impacts of human disturbance on the California Ridgway's rail and salt marsh harvest mouse, the USFWS determined that significant impacts to these species would occur if project noise levels in marsh habitat either: (1) exceeded 80 decibels (dBA), or (2) exceeded the ambient noise level by 3 dBA. Subsequent research suggests that impacts occur at much lower noise levels, and that a 60 dBA threshold would be appropriate for birds and mammals in an area with relatively high ambient noise levels. Therefore, this analysis uses the USFWS's thresholds to assess noise impacts from the proposed project, except the first threshold was lowered to 60 dBA.

The existing noise environment was measured as part of the noise analysis for the proposed project (see Appendix C, *North Point Isabel Cap Improvement Project Noise and Vibrational Technical Study*). Noise measurements were taken at six locations near the project site. Five of these locations were along the western edge of Hoffman Marsh. In addition, long-term (24-hour) noise measurements were taken at three locations that were both near the project site and the western edge of Hoffman Marsh. Data from these nine sampling locations were used to characterize ambient noise conditions and assess potential impacts to special-status animals that may occur in Hoffman Marsh.

Summary

According to the noise study:

- Single-event haul (dump) truck trips associated with the project would generate intermittent, maximum noise levels of approximately 77 dBA (Lmax) at 50 feet (from the truck). Project haul trips would not exceed 60 dBA Leq or result in a 3 dBA increase over the existing Leq conditions at any of the short-term noise measurement locations.
- Without mitigation, project construction noise levels would range from 54.5 dBA Leq to 74.9 dBA Leq at the western edge of Hoffman Marsh. The increase over ambient noise due to project construction activities would range from 1.0 dBA to 8.5 dBA, depending on the specific location and type of construction activity. This increase above ambient conditions would result in a potentially significant impact on special-status animals in Hoffman Marsh. Installation of a temporary noise barrier, as described in the project's noise study

(Appendix C), would reduce construction noise impacts to a level considered less than significant (see Mitigation Measure BIO-8).

- Maximum ambient noise levels (Lmax) at the eight sampling locations near Hoffman Marsh ranged from 64.1 dBA (at location ST-1) to 82.1 dBA (at location LT-2). Maximum noise levels (Lmax) due to construction of the project could reach 69 to 73 dBA at these locations.

Potential Traffic Noise Impacts to Wildlife

Table 17, *Project Haul Truck Trip Analysis*, in Section 3.13, *Noise*, shows the ambient noise levels at short-term measurement locations, the combined noise level due to project haul truck trips, and the increase over ambient noise level attributable to project haul truck trips. As shown in Table 17, project haul trips would not result in a 3 dBA increase over existing conditions at any of the short-term noise measurement locations representing noise-sensitive California Ridgway's rail receptors in the Hoffman Marsh. Although the project's haul trucks would generate maximum noise levels comparable to ambient conditions, it would greatly increase the frequency and abundance of these loud impulse noise events. In addition, chronic noise levels at Hoffman Marsh would exceed the 60 dBA threshold when construction activities are occurring in the eastern portion of the project site, and they could exceed ambient conditions by more than 3 dBA (i.e., the second USFWS thresholds). These impulse and chronic noise events associated with construction of the proposed project could have a significant impact on the Ridgway's rail and other special-status animals in Hoffman Marsh. Installation of a temporary noise barrier, as required by **Mitigation Measure BIO-8**, would reduce this impact to a **less-than-significant impact with mitigation**.

Potential Construction Noise Impacts to Wildlife

As shown in Table 18, *Proposed Project-Related Construction Noise, dBA L_{eq}*, in Section 3.13, *Noise*, project construction noise levels would range from 54.5 dBA L_{eq} to 74.9 dBA L_{eq} at representative potential nesting habitat in the Hoffman Marsh during all construction activities. In addition, the increase over ambient noise due to project construction activities would range from 1 dBA to 8.5 dBA without mitigation. As shown in Table 18, construction noise levels would result in the exceedance of applied ambient noise thresholds of a 3 dBA increase at LT-1 and LT-2 (66 dBA L_{eq}) and at LT-3 (60 dBA L_{eq}) during daytime hours for noise-sensitive California Ridgway's rail receptors in the Hoffman Marsh, which would result in a potentially significant impact. However, implementation of **Mitigation Measure BIO-8** would ensure that impacts would be reduced to a **less-than-significant impact with mitigation**.

Table 5, *Construction Noise Contours*, shows the 66 or 60 dBA L_{eq} construction noise contours relative to construction sites C1, C2, C3, and C4. Without noise-reducing measures, the 66 or 60 dBA L_{eq} construction noise contour would range from 325 to 975 feet and expose Hoffman Marsh habitat to noise levels exceeding the threshold. Table 5 also shows that with the incorporation of a barrier, set at 12 feet and 16 feet along the eastern and northeastern boundaries of the project site, construction noise from the project site would be reduced by 8 dBA, and the resulting 66 or 60 dBA L_{eq} noise contour would range from 125 to 375 feet from on-site construction activities.

Table 5 Construction Noise Contours, dBA L_{eq}

Construction Activity Phase	Noise Level from Construction Activity Sites to Hoffman Marsh				Resulting 60 dBA L_{eq} Contour (ft)	60 dBA L_{eq} Contour (ft) with 12-ft Barrier	60 dBA L_{eq} Contour (ft) with 16-ft Barrier
	C1	C2	C3	C4			
Rip rap	75.7	77.8	77.1	56.5	425	175	90
Trail Gravel	76.7	78.8	78.1	57.5	480	190	100
Grading 2 pieces of equipment	81.1	83.2	82.4	61.9	775	315	170
Grading 3 pieces of equipment	82.9	85	84.2	63.6	975	375	210
Landscape	73.4	75.5	74.8	54.2	325	125	70
Paving	75.7	77.8	77	56.5	425	175	90

Notes: Calculations performed with the FHWA's RCNM software are included in Appendix C.
Distance to sensitive habitat receptors is measured from the edge of the construction site to long-term measurement sites.

In addition, mitigation for construction noise levels at the ambient long-term noise locations were modeled using RCNM. Long-term noise measurement sites are used in the analysis to represent the nearest potential nesting habitat areas in the Hoffman Marsh. Threshold for LT-1 and LT-2 were determined to be 66 dBA L_{eq}, average daytime ambient noise level measured, while LT-3 was measured to be 60 dBA L_{eq}. Results are summarized in Table 6, *Construction Noise with Barrier Reduction, dBA L_{eq}.* As shown in Table 6, the highest noise levels during construction activity would be grading with three pieces of equipment, with noise levels at 73.8 dBA L_{eq}, 69.8 dBA L_{eq} and 63.9 dBA L_{eq}, respectively. A noise barrier with a height of 12 feet would reduce noise levels at LT-1 and LT-2 by 8 dBA. The highest noise levels would be reduced to 65.8 and 61.8 dBA L_{eq} respectively. Furthermore, a noise barrier with a height of 10 feet would reduce noise levels up to 5 dBA L_{eq} for LT-3. The barrier would reduce highest noise levels to 58.9 dBA L_{eq} at LT-3. Therefore, the noise barrier set at the height of 12 feet for LT-1 and LT-2 and a noise barrier set at the height 10 feet for LT-3 would reduce construction noise levels below the existing ambient noise levels and not cause a 3 dBA increase over ambient noise levels.

Table 6 Construction Noise with Noise Barrier Reduction, dBA Leq

<table>
<tr><th rowspan="2">Construction Activity Phase</th><th colspan="3">RCNM Noise Levels</th><th colspan="2">Distance to Noise Threshold with Noise Barrier (ft)</th><th colspan="3">Exceeds Thresholds with Barrier?</th></tr>
<tr><th>LT-1</th><th>LT-2</th><th>LT-3</th><th>LT-1 [1] and LT-2 [1]</th><th>LT-3 [2]</th><th>LT-1 with 66 dBA Threshold</th><th>LT 2 with 66 dBA Threshold</th><th>LT-3 with 60 dBA Threshold</th></tr>
<tr><td>Rip rap</td><td>66.6</td><td>63.7</td><td>57.8</td><td>90</td><td>--</td><td rowspan="6">No</td><td rowspan="6">No</td><td rowspan="6">No</td></tr>
<tr><td>Trail Gravel</td><td>67.7</td><td>63.7</td><td>57.8</td><td>100</td><td>--</td></tr>
<tr><td>Grading 2 pieces of equipment</td><td>72</td><td>68</td><td>62.1</td><td>160</td><td>450</td></tr>
<tr><td>Grading 3 pieces of equipment</td><td>73.8</td><td>69.8</td><td>63.9</td><td>200</td><td>550</td></tr>
<tr><td>Landscape</td><td>64.4</td><td>60.4</td><td>54.5</td><td>65</td><td>--</td></tr>
<tr><td>Paving</td><td>66.6</td><td>62.6</td><td>56.7</td><td>90</td><td>--</td></tr>
</table>

Notes:
1. A noise barrier with the height of 12 feet would reduce noise levels up to 8 dBA.
2. A noise barrier with the height of 10 feet would reduce noise levels up to 5 dBA.
Calculations performed with the FHWA's RCNM software are included in Appendix C.
Distance to sensitive habitat receptors is measured from the edge of the construction site to long-term measurement sites.

In summary, the noise analysis described above - and as shown in Table 7, *Biological Resources Construction Noise Analysis Summary* - uses Noise Monitoring Locations LT-1, LT-2, and LT-3 to establish ambient noise conditions for modeling and results along the west edge of Hoffman Marsh. Figure 6, *Approximate Noise Barrier Location*, shows the approximate location where a noise barrier would be installed pursuant to Mitigation Measure BIO-8 to ensure adequate noise reduction, and shows the Noise Monitoring Locations used in this analysis.

As shown in Figure 6, the noise barrier is proposed to be located west of the marsh and would not reduce freeway noise from I-580; therefore, noise levels are expected to remain at their current levels rather than be reduced below those attributable to I-580 traffic. The analysis assumes the proposed Project's construction equipment is the only noise-generating source(s); consequently, the noise Monitoring Location noise levels with a barrier shown in Table 7 may be below ambient noise levels. The analysis assumes the noise-generating construction equipment operates near the Project Site boundary, with the noise sources closest to the noise monitoring locations (particularly LT-1). As described in Section 3.13, *Noise*, the analysis reflects a conservative (i.e., "worst case") scenario because noise-generating construction equipment would move around the Project Site and would not remain at the edge of the construction site for prolonged periods.

As previously described, the CEQA analysis threshold for this evaluation is whether noise levels would exceed a 3-dBA increase in existing ambient noise levels. As shown in Table 7, at Noise Monitoring Locations LT-1, LT-2, and LT-3, noise levels with a 12-foot barrier (an 8-dBA reduction) are modeled to be below the existing average ambient noise levels. As shown in Table 7, a 16-foot barrier (a 12 dBA reduction) would further reduce construction noise below ambient levels; however, as described above, reducing noise below existing ambient levels at Hoffman Marsh is not possible due to the barrier's position and the existing I-580 noise source to the east. Thus, any additional noise reduction provided by a 16-foot barrier would be nominal and limited by existing conditions outside of the Project Site.

Based on this analysis, a 12-foot or equivalent 8-dBA noise-reduction barrier would be sufficient to reduce construction noise levels to below the CEQA analysis threshold.

Table 7 Biological Resources Construction Noise Analysis Summary

Noise Monitoring Location	Existing Ambient Noise (dBA) [1]	Unmitigated Maximum Construction Noise Level (dBA) [2]	Applicable Threshold (dBA) [3]	Maximum Construction Noise Level with Noise Barrier (dBA) [4] (Exceeds Threshold?)		
				10-Foot Barrier	12-Foot Barrier	16-Foot Barrier
LT-1	66.4	74	66	69 **Yes**	66 No	62 No
LT-2	66.2	70	66	65 No	62 No	58 No
LT-3	60.1	64	60	59 No	56 No	52 No

Notes: **bold** = exceeds threshold
1. Existing ambient noise level represents average hourly noise level measured during noise monitoring (see Appendix C, *North Point Isabel Cap Improvement Project Noise and Vibrational Technical Study*).

Noise Monitoring Location	Existing Ambient Noise (dBA) [1]	Unmitigated Maximum Construction Noise Level (dBA) [2]	Applicable Threshold (dBA) [3]	Maximum Construction Noise Level with Noise Barrier (dBA) [4] (Exceeds Threshold?)		
				10-Foot Barrier	12-Foot Barrier	16-Foot Barrier

2. Maximum construction noise level assumes 3 pieces of grading equipment operating simultaneously. See Table 13, *Proposed Project-Related Construction Noise, dBA Leq*, in Appendix C for details.
3. Applicable threshold varies by location based on existing ambient noise levels, as follows:
   At sites LT-1 and LT-2, where existing ambient noise is above 60 dBA, a threshold of 66 dBA (i.e., no net increase from existing ambient noise) is used.
   At site LT-3, where existing ambient noise is 60 dBA or below, a threshold of 60 dBA is used.
4. Noise barrier reductions are applied as follows:
   10-foot: 5 dBA reduction
   12-foot: 8 dBA reduction
   16-foot: 12 dBA reduction

Source: USGS, East Bay Regional Parks District; PlaceWorks 2024.

Figure 6
Approximate Noise Barrier Location

Mitigation Measure BIO-1: Worker Environmental Awareness Training. A qualified biologist shall conduct an environmental awareness training session for all work crews and contractors. The training session shall be conducted prior to initiating any work on the project, and upon the arrival of any new workers. The training shall include information on the sensitive biological resources that occur (or could occur) at the project site; the environmental regulations pertaining to the project; the locations of sensitive areas or exclusion zones; the role and authority of the biological monitor and other project members; and the project's best management practices (BMPs) and mitigation measures. Construction personnel shall be informed that noise and human activity in the vicinity of Hoffman Marsh shall be confined to the minimum level necessary to complete the project (e.g., workers should not congregate near the marsh during breaks). The qualified biologist shall maintain a record of all personnel that have undergone the environmental awareness training.

Mitigation Measure BIO-2: Delineation of Sensitive Resources. Prior to the start of construction activities, a qualified biologist shall use flagging or temporary fencing to demarcate aquatic features, pickleweed mats, and other sensitive resource areas (e.g., Hoffman Marsh) so as to minimize the potential for inadvertent intrusion by construction equipment or personnel. In association with Mitigation Measure BIO-9 (Biological Monitoring), the biologist shall conduct regular inspections of the material(s) used to demarcate sensitive resource areas to ensure their integrity (visibility).

Mitigation Measure BIO-3: Preconstruction Surveys. A qualified biologist shall conduct a preconstruction "clearance" survey for wildlife immediately prior to initial construction commencement activities. The purpose of the survey is to minimize potential impacts to common wildlife species; additional surveys are required to avoid or minimize impacts to special-status animals (see Mitigation Measures BIO-4 [Nesting Birds], BIO-5 [Burrowing Owl], BIO-6 [California Ridgway's Rail and Salt Marsh Harvest Mouse], and BIO-7 [Bumble Bees]). During the survey, the biologist shall thoroughly search areas that will be subject to ground-disturbing activities. If any common (i.e., not special status) wildlife species are detected during the survey, the biologist shall devise a strategy for avoiding impacts (e.g., animal relocation) if, in the biologist's opinion, the animal is unlikely to successfully flee the project impact area once construction begins (e.g., animals with low vagility).

Mitigation Measure BIO-4: Nesting Birds. A qualified avian biologist shall conduct a nesting bird survey no more than 5 days prior to the initiation of any construction activities that will occur during the avian nesting season (approximately February 1 to August 31). The nesting bird survey shall include the entire project site and all potential nest substrates within 1,000 feet of the project boundary for raptors, and 500 feet of the project boundary for all other avian taxa. At a minimum, the survey shall occur: (a) in the first 4 hours after sunrise when birds are most active, and (b) when weather conditions are conducive to bird detection (e.g., not during periods of high winds, sustained rain, or heavy fog). To prevent damage to marsh vegetation, surveyors shall not enter Hoffman Marsh. Because marsh-nesting birds construct well-concealed nests that are very difficult to locate, the avian biologist shall use behavioral cues to infer potential nest locations in the marsh. These potential nest locations shall be treated as occupied nests. All nest or potential nest locations detected during the survey shall be recorded with a GPS unit and depicted on a map. If no nests are found within the survey area, no further action is necessary.

The biologist shall use flagging, temporary fencing, or other conspicuous materials to demarcate construction activity exclusion zones (buffers) around all active or potentially active nests (i.e., nests with eggs or young present). The default buffer size shall be 500 feet for raptors and 250 feet for all other bird taxa. However, the avian biologist shall have the authority to increase or decrease the buffer distance(s) based on: (a) the nest location, topography, and cover; (b) an evaluation of the birds' behavior to determine their sensitivity to human disturbance; (c) the specific construction activities that would occur in the vicinity of the nest; and (d) whether the temporary noise barrier shields the nest from construction activities. No work shall occur within an exclusion zone until the avian biologist has determined that the young have fledged.

Given the size of the survey area, the survey shall include multiple site visits, multiple avian biologists, or both. The avian biologist(s) shall employ a variety of nesting searching techniques, as described by Martin and Geupel (1993). These include incidental flushing of an adult from the nest, watching parental behavior (e.g., carrying nest material or food), and systematically searching potential nesting substrates.

If there is a lapse in construction activities for seven days or more during the avian nesting season, a qualified biologist shall conduct additional pre-construction nesting bird surveys in areas of potential habitat before proposed project activities can be reinitiated.

Mitigation Measure BIO-5: Burrowing Owl. During each year of proposed project construction, a qualified biologist shall conduct non-breeding season surveys for burrowing owls in accordance with the survey protocol described in CDFW's *Staff Report on Burrowing Owl Mitigation* (2012).

If an occupied burrowing owl burrow is detected during the surveys or at any other time during construction of the proposed project, the project biologist shall use flagging, temporary fencing, or other conspicuous materials to demarcate construction activity exclusion zones (buffers) around the burrow, if the burrow is located within 150 meters of the project site. The buffer size shall be determined by a qualified biologist taking into consideration existing noise levels, activities in the vicinity and/or any noise attenuation and visual screening devices to be installed. Prior to establishing the buffer, the biologist shall monitor the owl's behavior to determine if it has been sensitized to human disturbance. If the owl exhibits signs of being intolerant to human disturbance, the buffer shall be extended 100 meters (328 feet) or more, depending on the type of construction activities that would occur in the vicinity of the burrow and the individual owl's level of sensitivity. The activity exclusion zone shall be maintained until the biologist determines the owl has vacated the site for the season.

Mitigation Measure BIO-6: California Ridgway's Rail and Salt Marsh Harvest Mouse. The East Bay Regional Park District shall install a temporary noise barrier with a minimum 8-dBA noise-reduction performance, approximately 12 feet in height along the eastern boundary of the project site, west of the Hoffman Marsh. The barrier shall adhere to the specifications described in Mitigation Measure BIO-8 or equivalent specifications that provide a minimum 8-dBA noise-reduction performance. The barrier shall be installed outside of the Ridgway's rail breeding season (from February to August) and prior to initiating project construction activities. Prior to or during installation of the noise barrier, the barrier shall be modified to prevent avian predators from being able to perch on it. The barrier (and associated perch deterrents) shall be properly maintained and shall not be removed until project construction activities are complete.

Construction vehicles shall not travel on the San Francisco Bay Trail during the 2 hours before and after a predicted extreme high tide event. An extreme high tide event is defined as a tidal event with a high tide peak of greater than 6.5 feet relative to the mean low water line measured at the Golden Gate tidal station.

Mitigation Measure BIO-7: Bumble Bees. A qualified biologist with demonstrated ability to identify locally occurring special-status bumble bee species shall survey for bumble bees no more than 14 days prior to the commencement of construction activities during the colony active period or the gyne flight season (approximately March through October). The survey shall occur at least two hours after sunrise or two hours before sunset when air temperatures are between 60 and 90 degrees Fahrenheit and there is no rain. The survey area shall include the project boundaries and a surrounding 100-foot buffer area where accessible and suitable habitat is present. The survey duration shall be a minimum of one person-hour of searching per three acres of suitable habitat. At a minimum, the survey methods shall include the following:

- Search areas with flowering plants for foraging bumble bees. Observed foraging activity may indicate a nest is nearby and, therefore, the survey duration shall be increased when foraging bees are present.

- Watch any bumble bees present and observe their flight patterns. Attempt to track their movements between foraging areas and the nest.
- Visually look for nest entrances. Observe burrows, any other underground cavities, logs, or other possible nesting habitat.
- Look for concentrated bumble bee activity.
- Listen for humming of nest colony.
- If bumble bees are observed, attempt to identify the species by taking a picture.

If foraging bees are present and a nest has not been found, floral resources within the project's disturbance footprint may be carefully removed by the contractor with hand-held tools to minimize foraging bee presence during project activities. The continuation of bumble bee activity once such floral resources are removed may be an indication that a nest is present.

The biologist conducting the survey shall record when the survey was conducted, a general description of any suitable foraging habitat/floral resources present, a description of observed bumble bee activity, a description of any vegetation removed to facilitate the survey, and their determination on whether the survey observations suggest a special-status bumble bee nest may be present or if construction activities could otherwise harm the species.

If any sign(s) of a bumble bee nest is observed, and if it cannot be established whether the nest is associated with a special-status species, then construction shall not commence within 50 feet of that location (a) until it has definitively been determined through an additional survey that the species present is not of special-status, (b) until the colony active season ends, (c) without obtaining take authorization, or (d) unless other appropriate actions have been taken to ensure a nest of a special-status bumble bee species is not harmed.

Mitigation Measure BIO-8: Hoffman Marsh. The East Bay Regional Park District shall implement the following measures during all phases of construction~~:~~

- Construct temporary noise barriers according to the following specifications or equivalent specifications that meet the minimum 8-dBA noise-reduction performance criteria along the eastern boundary of the Project Site west of the Hoffman Marsh.
  - The noise control curtain shall consist of durable, flexible composite material featuring a noise barrier layer bonded to sound-absorptive material on one side.

  - The noise barrier layer shall consist of a rugged, impervious material with a surface weight of at least one pound per square foot.
  - The sound absorptive material shall include a protective face and be securely attached to one side of the flexible barrier over the entire face.
  - The noise curtain material shall be weather and abuse resistant, and exhibit superior hanging and tear strength during construction.
  - The curtain's noise barrier layer material shall have a minimum breaking strength of 120 pound per square inch (lb/in.) pursuant to Federal Test Method 191 A-M5102 and minimum tear strength of 30 lb/in. pursuant to ASTM D117. Based on the same test procedures, the noise curtain absorptive material facing shall have a minimum breaking strength of 100 lb/in. and a minimum tear strength of 7 lb/in.
  - The noise curtain material shall be corrosion resistant to most acids, mild alkalies, road salts, oils, and grease. It also shall be mildew resistant, vermin proof, and non-hygroscopic.
- When feasible, limit the number and types of louder construction equipment activity along the proposed Project's eastern boundary by scheduling louder pieces of equipment to occur separately.

Mitigation Measure BIO-9: Biological Monitoring. When construction activities are occurring, a qualified biologist shall inspect the site at least twice per week to ensure implementation of, and compliance with, all mitigation measures specified herein, and with the proposed project BMPs. If the biologist observes any instances of non-compliance, the biologist shall (a) take immediate actions to rectify the issue and (b) provide a written report (with recommended remedial actions) to the project team (including the construction contractor's foreman and the East Bay Regional Park District's project manager).

- In addition to monitoring construction activity and compliance with other mitigation measures and BMPs, the biologist shall:
- a) Monitor the behavior and status of birds associated with construction activity exclusion zones (e.g., around burrowing owl burrows or active nest sites). Monitoring shall occur for a duration sufficient to determine the bird's sensitivity to human disturbance. At a minimum, monitoring shall occur during the first 5 days during which construction activity occurs within 100 feet of the exclusion zone. Thereafter, monitoring may be reduced to twice per week. If, based on the behavior of the bird,

the biologist determines a larger exclusion zone is warranted, the biologist shall extend the exclusion zone and immediately inform the construction crew.

- b) Search for new bird nests that may have been established since completion of the nesting bird survey. If any new nests are detected, the biologist shall establish a construction activity exclusion zone around the nest, as described in Mitigation Measure BIO-4.
- c) Scan for bumble bees within the project footprint. If any bumble bees are detected, the biologist shall halt any construction activities that could harm (e.g., kill) the bumble bees. If the bumble bees are (or could be) a special-status species and a nest is potentially present, Mitigation Measure BIO-7 shall be reinitiated. If the bumble bees are not a special-status species, construction may recommence.

  If a previously undetected special-status animal species is detected within the construction area, construction activities that could harm the animal shall be halted until the animal leaves the construction area on its own volition. If a special-status species is detected outside of the construction area, the biologist shall monitor the behavior and movement of the animal. If the biologist determines the animal might move into the construction area, or could be indirectly impacted by project activities, the biologist shall either halt or modify construction activities to avoid any potential impacts to the animal.

The Qualified Biologist shall have authority to stop work any time construction activities appear to cause disturbance to rails (e.g., rails vocalize or fly away from a nest), an active rail nest is found, or if the Biologist believes the construction activities could have a significant impact on sensitive biological resources.

B) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

Invasive Plants

Invasive plants threaten biodiversity, alter ecosystem processes, and can cause extinction of native species. Construction sites can be highly susceptible to invasive plant colonization. Construction vehicles and equipment are common vectors for transporting invasive plant propagules from one place to another. In addition, soil and vegetation disturbance associated with construction activities creates suitable conditions for the establishment of invasive plants. If an invasive plant propagule is transported to the project site (e.g., by construction equipment), the plant could become established at the site and subsequently spread into adjacent habitats (e.g., Hoffman Marsh). Although the project site would temporarily provide conditions conducive to invasive plant colonization, all areas that are disturbed by project construction activities would subsequently be hydroseeded or covered by native plantings, thereby reducing the potential for establishment and survival of invasive plants.

Riparian Habitat or other Sensitive Natural Community

The *Salicornia pacifica* Herbaceous Alliance (pickleweed mats) and greater Hoffman Marsh comprise a sensitive natural community. The project does not involve ground disturbance activities within this sensitive natural community. However, the community could be directly impacted if construction equipment or personnel inadvertently stray into the marsh. In addition, the sensitive natural community could be indirectly affected through the accidental discharge of chemicals (e.g., equipment fuel and oil) or transport of loose sediment (via wind or rain) from the project site into the marsh. These impacts are potentially significant, but would be reduced to a **less-than-significant impact with mitigation** through implementation of the project's BMPs, and through implementation of **Mitigation Measure BIO-1** (Worker Environmental Awareness Training), **Mitigation Measure BIO-2** (Delineation of Sensitive Resources), and **Mitigation Measures BIO-9** (Biological Monitoring).

C) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

The tidal and intertidal zones in the study area are jurisdictional waters regulated by the Army Corps of Engineers and the California State Water Resources Control Board. The project does not involve ground disturbance or any other work activities within jurisdictional waters. Rip rap and relatively steep banks are located between proposed work areas and jurisdictional waters; these features would prevent construction equipment and personnel from inadvertently straying into the jurisdictional waters. For these reasons, the project would not have any direct effects on jurisdictional waters.

The project would have a beneficial impact on jurisdictional waters by eliminating (or significantly reducing) the lead-contaminated soils that have been entering the perimeter drainage ditch, Hoffman Channel, and San Francisco Bay under existing conditions. However, the project could negatively affect jurisdictional waters through the accidental discharge of construction-related chemicals (e.g., equipment fuel and oil) or transport of loose sediment (via wind or rain) from the project site into jurisdictional waters. These indirect impacts are potentially significant but would be reduced through implementation of the project's BMPs and further reduced to a **less-than-significant impact with mitigation** through implementation of **Mitigation Measure BIO-1** (Worker Environmental Awareness Training), **Mitigation Measure BIO-2** (Delineation of Sensitive Resources), and **Mitigation Measure BIO-9** (Biological Monitoring).

D) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

Based on scientific evidence, the geographic setting of the study area, and the surrounding land uses, the Biological Resources Assessment identifies that the study area does not function as a landscape-level corridor or linkage for wildlife. Any impacts to wildlife use of the study area (e.g., due to construction activities) would be temporary; wildlife would be able to continue utilizing the study area after project construction is complete. Wildlife movement with potential to be temporarily affected would involve common species such as Virginia opossum (*Didelphidae virginiana*), racoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*). Due to the absence of potential habitat, the project site does not function as a movement corridor for special-status species. For these reasons, project impacts on wildlife movement corridors would be **less than significant**.

E) LESS-THAN-SIGNIFICANT IMPACT

The project site is an existing closed landfill that is used as an off-leash dog use area; it would remain a closed landfill and off-leash dog use area after proposed project completion. The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. As a result, the proposed project would not conflict with local policies or ordinances protecting biological resources, and the impact is **less than significant**.

F) NO IMPACT

The project site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Therefore, **no impact** would occur.

3.5 Cultural Resources

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

References: Perris 2011; Perris 2005a; Perris 2005b.

3.5.1 Environmental Setting

North Point Isabel is an entirely artificial landform, composed of construction/demolition and industrial waste. It was constructed during the 1950s and 1960s, and therefore would not have been part of the pre-contact or proto-contact tribal landscape. This landform was constructed during the historic-period and could contain resources associated with that time frame.

The following section describes the existing cultural resources setting for the project site and evaluates whether the project would result in significant impacts on cultural resources.

METHODS

Records Search

The East Bay Regional Park District maintains a subscription to the Northwest Information Center (NWIC) of the California Historical Resources Information System for the lands it owns and operates, with a 50-foot (15-meter) buffer, which is updated every six months. The Park District conducted a search of the subscription data (File Number 23-0387, updated in October 2023) for site records and previous studies for the project site on the Richmond, California United States Geological Survey 7.5-minute quadrangle. The National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and the Office of Historic Preservation (OHP) Historic Properties Directory (HPD) data files were also reviewed. The background investigation to identify known and potential historical (built environment) resources also reviewed the California Historical Landmarks and Points of Interest publications and updates, the OHP Built Environment Resource Directory (BERD), and the Richmond Historic Register.

Sacred Lands File Search

In an effort to identify any Native American cultural resources, the Park District requested a Sacred Lands Files (SLF) search for the project site on November 6, 2023. Cody Campagne, Cultural Resources Analyst, responded on December 11, 2023, with a letter stating that the result of the SLF check through the NAHC was "positive'' (see Section 3.18, *Tribal Cultural Resources*).

Historical Resources

Archival research did not identify any previously inventoried or evaluated built environmental resources within the project site.

Built Environment Survey

A Page & Turnbull, Inc. architectural historian conducted a built environment survey on March 9, 2024. Photographs and notes were taken to document the project site. The North Point Isabel landform was recorded and described on Department of Parks and Recreation (DPR) 523 series forms.

HISTORIC CONTEXT

Richmond Area

The project site is located along what is now the Richmond shoreline. In 1846, California was ceded to the United States at the close of the Mexican-American War. Former land grants, deeds, and property titles became even more confused, and areas with disputed ownership, including the former Rancho San Pablo, were slow to develop. However, when the Gold Rush struck California in 1849, the Point Isabel ferry established by Don Castro provided ready transportation to miners traveling from the port of San Francisco to the gold fields of the Sierra foothills. A second ferry service opened in 1859 at Ellis Landing, at the end of Harbor Way in present-day Richmond.

During the late 1880s, much of the land in present-day Richmond was marshy and developed sparsely by ranchers and scattered settlers. In 1894, a settlement against the Castro family ended their 40-year battle to retain their land and started an era of increased private development in Richmond. In 1895, developer Augustin S. Macdonald recognized the area's advantageous connection between land and navigable deep water, and he proposed a transcontinental rail terminus and ferry service to a handful of railroad magnates. By 1899, the Santa Fe Railroad had established its western terminus in Richmond, for commercial traffic between the San Joaquin valley and the San Francisco Bay Area.

The same year, Macdonald and a syndicate of railroad executives and oil well developers purchased and subdivided 550 acres of land into a standard urban grid. Macdonald filed his plan with Contra Costa County for a new city named Richmond. The area of the new city was bounded by Barrett Avenue, Ohio Avenue, Garrard Boulevard, and 23rd Street. Within a decade, this area was dotted with homes and commercial development.

Early 20th Century

Around the turn of the twentieth century, the establishment of both the Santa Fe Railroad and Standard Oil refinery ensured Richmond's development as a thriving industrial city. Within one year of its establishment in 1901, the Standard Oil refinery grew to be the largest on the west coast, transforming crude oil into heating fuel and kerosene for lighting. In addition to jobs and workers, these industries spurred the construction of a public trolley system, and commercial and residential development increased apace. By 1907, the Richmond Chamber of Commerce touted the new city as "The Pittsburgh of the West." More industries settled in the city in the following decades, including Winehaven, American Standard, and the Pullman Company.

By the mid-1910s, the center of gravity for Richmond had definitively shifted from its earlier location in Point Richmond to area developed by A.S. Macdonald on Macdonald west of 4th Street, with modest development between 4th and 8th Streets and scattered development to the east. By the 1920s, four large buildings concentrated around Tenth and Macdonald showed that this intersection had become the business center for Richmond. Richmond's economic vitality during the 1920s reflected national trends, but also a major local development.

Richmond during Wartime

As World War II (WWII) began in Europe, government leaders from the United States and England argued for robust support for Great Britain as it sought to defend itself from Germany. By fall of 1940, Henry Kaiser and the Six Companies (partners responsible for construction of major New Deal projects such as Hoover Dam) were negotiating with the U.S. Maritime Commission (USMC) to locate a shipyard in Richmond that could replace British merchant ships that were being rapidly sunk by German forces. Fred Parr, the long-time force behind the development of Richmond's waterfront, had reportedly been wooing Kaiser and his engineers since 1939 and, by December 19, 1940, final arrangements for a shipyard on nearly 100 waterfront acres were in place. After the U.S. entered WWII in December 1941 and President Franklin Delano Roosevelt declared the nation an "arsenal of democracy," the Kaiser Richmond Shipyard complex grew to ultimately include four shipyards and a prefabrication plant by 1943. Richmond's shipyards pioneered the application of mass production methods for shipbuilding, setting speed and production records and producing 20 percent of the nation's wartime merchant marine fleet.

As a direct result of the Kaiser Shipyards, Richmond became an icon of wartime mobilization's impact on American communities. Kaiser staff screened applicants and made preliminary placements for workers from a centralized hiring hall at the Northeast corner of 9th Street and Nevin Avenue in the former Montgomery Wards department store. The Kaiser Shipyards were the largest defense employer, but 55 other industries fed the city's transformation into a wartime boomtown. While several new industries, such as the Kaiser Shipyards, helped win Richmond its status as a "Purple Heart City," it was most likely through pre-war industries' wartime conversion and securing of government contracts for their goods that the figure of 56 industries was reached.

History of Point Isabel

Victor Castro named Point Isabel after his daughter and built a wharf for ferry access, along with a slaughterhouse for cowhides for trade with merchants in San Francisco and a hotel for ferry passengers. In the 1850s, Castro was forced to sell most of his land, and a widow named Minna Quilfelt and her new husband Richard Stege bought 500 acres of the former Castro tract. In the 1870s, Stege was known for his large bullfrog farm that raised some 15,000 frogs to supply upscale restaurants in San Francisco. He eventually sold off the land, but the industrial area land surrounding Point Isabel retained an association with the Stege name.

In the 1870s, the introduction of the transcontinental railroad north from Oakland allowed for new industry, and the East Bay was particularly suited to the production and testing of dynamite. Dynamite was a new explosive that was originally produced in the dunes of San Francisco beginning in the 1860s, but the resulting large blasts led companies to seek testing sites in more remote places. Promontories and undeveloped sections of the East Bay proved to be ideal places for dynamite testing as the blasts were less likely to impact dense urban areas. In 1902, Vigorite Powder Company began producing and shipping dynamite on Point Isabel, and maps as early as 1915 document the presence of railroad transportation to the promontory.

The Santa Fe Land Improvement Company, which was the development branch of the Santa Fe Railroad Company, purchased the land including Point Isabel and the future location of the project site in the early 1940s. Fill of uplands on the larger Point Isabel promontory began in phases in the 1940s and resumed in the 1950s through 1969, with materials including battery casings, concrete rubble, asphalt, and road base soils.

Construction of North Point Isabel

Research of permit records, plans, and memoranda did not identify specific documentation of the dates of infill or construction chronology of the project site. However, based on historic maps, newspaper records, aerial photographs, and documentation by government and environmental agencies, the majority of the North Point Isabel uplands appear to have been infilled between approximately 1965 and 1969 by the Santa Fe Land Improvement Company. From analysis of aerial photographs, the trestle bridge appears to have been constructed between 1965 and 1968 by the Santa Fe Railroad.

For many years, the subject site was colloquially referred to as “Battery Point” due to piles of battery casings along the shoreline. By the 1970s, there was an emerging public concern for environmental conservation and access to green spaces, with a particular focus on the ways that brownfield sites (formerly industrial or polluted sites) were impacting public and wildlife welfare. In 1975, the Point Isabel Regional Shoreline (south of the project site directly across the Hoffman Channel) was remediated and opened as a landscaped park. By the 1980s, public and political scrutiny intensified around reports of poisoned marine animals along the Point Isabel shoreline and high levels of toxic materials within the infill of the project site. Several large-scale environmental remediation projects were subsequently implemented in the 1980s and 1990s to address the toxicity impacting the site and surrounding marine life.

The project site was owned by the Santa Fe Land Improvement Company (now Catellus Development Corporation) from approximately the 1940s until 1998 when it was sold to the State of California. The parcel became part of the McLaughlin Eastshore State Park in 2002.

HISTORICAL RESOURCES IN THE PROJECT SITE

No previously recorded built environment resources were identified within the project site as a result of the NWIC or background research. However, one potential historical resource, the North Point Isabel landform, was identified in the project site. The historical resource evaluation for the North Point Isabel landform concluded that it is not eligible for listing in the National Register or the California Register and does not meet the criteria as a historical resource for the purposes of CEQA (Page & Turnbull 2024). Thus, the project site is not considered a historical resource for the purposes of CEQA.

ARCHAEOLOGICAL RESOURCES

No previously recorded archaeological resources were identified within the project site as a result of the NWIC records search or as a result of the intensive pedestrian survey conducted by the District's archaeologist.

One archaeological resource (P-07-178) has been recorded within 0.25 miles of the project site. Pilling (1952) provides the earliest nonnative, written documentation for this Native American resource. The documentation was updated by Origer & Associates in 2017 (Pilling).

The project site has not previously been included in any site-specific studies. Nine studies have been conducted within a 0.25-mile radius on lands owned or operated by the Park District. These studies, bibliographic information, and the presence of resources are listed in Table 8, *Archaeological Studies Conducted within a 0.25-Mile Radius of the Project Site*.

Table 8 Archaeological Studies Conducted within a 0.25-Mile Radius of the Project Site

Study Number	Report Title	Author(s)	Study Year	Identified Resources (Yes/No)
S-031579	Cultural Resources Study of the Stege Property, Richmond, Contra Costa County, California	Holman, M.	2006	No
S-004950	Archaeological Survey Report for Proposed High Occupancy Vehicle Lanes from Bay Bridge to Carquinez Bridge, 04-ALA/CC-80 2.0/8.0, 0.0/14.1, EA 04209-400211	Buss, Margaret	1981	Yes

Study Number	Report Title	Author(s)	Study Year	Identified Resources (Yes/No)
S-002915	Archaeological Survey, Route 17 (Hoffman Freeway) Between Route 80 and Bayview Avenue, 04133-108701	Melandry, Mary, and Cindy S. Desgrandchamp	1978	No
S-012965	Historic Property Survey Report, Railroad Grade Separations on Route 17 in Contra Costa County from Canal Boulevard to Castro Street in the City of Richmond, Post Mile: 4.4 to 5.1	Melandry, Mary, and Lois Webb	1976	Yes
S-023366	East Bay Regional Park District-Cultural Resources Study for RTP Grant Project Point Isabel to Central Avenue San Francisco Bay Trail, City of Richmond, Contra Costa County	Busy, Colin, and Stuart A. Guedon	1999	No
S-021150	04-CCO, ISTEA REF. No. 04-CCO-0-EBRPD STPLE-6075, Pt. Isabel to Miller/ Knox Trail	Gudeon, Stuart A., and Colin Busby	1997	No
S-050987	Historical Resources Study for the Point Isabel Shoreline Improvements	Alshuth, Taylor, and Janine Origer	2017	Yes

Study Number	Report Title	Author(s)	Study Year	Identified Resources (Yes/No)
	Project, Richmond, Contra Costa County, California			
S-050451	Pear Cultural Resources Summary	Kaptain, Neal	2007	No
S-022817	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS01: Sacramento to Oakland	Nelson, Wendy J., Maureen Carpenter, and Julia G. Costello	2000	Yes

Archaeological Survey

The District's archaeologist conducted an intensive pedestrian survey of the project site on October 25, 2023. Parallel transects, approximately 20 meters apart, were walked northeast/southwest, across the project site, back and forth from the San Francisco Bay Trail toward the landform point. Ground visibility was relatively low, with dense vegetation across the project site. The shoreline was covered with concrete rip rap. The project site was examined for historic-period Native American and non-Native American cultural resources (deposits of ceramics, bottles, cans, tools, evidence of the railroad, camps or refuse deposits associated with railroad workers, anthropomorphic soils, etc.).

Pre-contact Setting

Although the project site was not constructed until the historic period, this section provides an overall understanding of pre-contact life within the region.

- **Paleoindian Period, 11,500 to 8000 B.C.** Characterized by big-game hunters occupying broad geographic areas. Evidence of human habitation during this period has not yet been discovered in the San Francisco Bay Area (Milliken et al. 2007).

- **Early Holocene (Lower Archaic), cal 8000 to 3500 B.C.** Early occupation of the San Francisco Bay region is characterized by the use of milling slabs, hand stones, and flaked tools, including the use of large, wide-stemmed and leaf-shaped projectile points. Data yielded from these early sites indicate a mobile foraging strategy.

- **Early Period (Middle Archaic), 3500 to 500 cal B.C.** Indicators of a general trend toward a more sedentary lifestyle are the hallmarks of this time period. New groundstone technology and the first cut shell beads in mortuary settings imply regional symbolic integration and an increase in trade throughout the San Francisco Bay Area.

- **Lower Middle Period (Initial Upper Archaic), 500 cal B.C. to A.D. 430.** The somewhat abrupt change in the bead style during this time period is indicative of a cultural disruption. New bone tools and ornaments, such as elk femur spatulae, whistles, and basketry tools were produced. While milling slabs were still in use at some locations, there was a prevailing use of mortars and pestles throughout this period.

- **Upper Middle Period (Late Upper Archaic) cal A.D. 430 to 1050.** During this period, the Olivella saucer bead trade network collapsed, sea otter use increased, and the Meganos extended burial mortuary pattern spread within the interior of the East Bay and into the Santa Clara Valley. Bead Horizon M3 is the apex of the Upper Middle Period, characterized by small, delicate square saddle Olivella beads in burials, often in off-village single component cemeteries. Single barbed-bone fish spears, ear spools, and large mortars appear during the M3 horizon.

- **Initial Late Period (Lower Emergent) A.D. 1050 to 1550 and the Terminal Late Period.** Lifeways during this period became more socioeconomically complex as a new level of sedentism and social stratification emerged. The cultural items affiliated with this bead horizon include bird bone whistles and tubes, flanged steatite pipes, the “banjo” abalone effigy ornament, and the Olivella callus cup bead. The only shell beads in the South and Central bay mortuaries from this period were Olivella lipped and spire-lopped beads.

See Section 3.18, *Tribal Cultural Resources* for ethnographic information for Chochenyo Ohlone peoples.

3.5.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

One built environment resource, North Point Isabel, was identified in the project site. The North Point Isabel landform does not meet any evaluation criteria and is not eligible for listing in the National Register or California Register and therefore does not constitute a historical resource for the purposes of CEQA (Page & Turnbull 2024). Nevertheless, if a historical resource is encountered during project-related construction, implementation of Mitigation Measure CUL-1 would reduce the impact to less-than-significant impact with mitigation.

> **Mitigation Measure CUL-1:** If historical/archaeological resources are encountered during construction activities, work in the immediate area should be halted and the Park

District shall retain an archaeologist meeting the Secretary of the Interior Professional Qualification Standards for Archaeology immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work may be warranted, such as data recovery, to avoid any adverse effects to archaeological resources.

B) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

The project site consists of an artificial landform constructed during the historic period. No historic-period (Native American or otherwise) archaeological resources or unique archaeological resources pursuant to Section 15064.5 of the California Public Resource Code were identified during the background research for this project. Nevertheless, if an archaeological resource is encountered during project construction, implementation of **Mitigation Measure CUL-1** would reduce the impact to a **less-than-significant impact with mitigation**.

C) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

The project site consists of an artificial landform, and there is no ground disturbance associated with this project. There is a very low potential to encounter human remains during project implementation. Nevertheless, if human remains are encountered during project construction, implementation of Mitigation Measure CUL-2 would reduce the impact to a **less-than-significant impact with mitigation**.

Mitigation Measure CUL-2: In the event that human remains are discovered during project implementation, all work in that area must halt and the Contra Costa County coroner must be contacted, pursuant to California Public Resources Code Sections 5097.94, 5097.98, and 5097.99.

3.6 Energy

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of			X	

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
energy resources during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			**X**	

References: N/A

3.6.1 Environmental Setting

The project site is currently used as a park with an off-leash dog use area. There is no energy consumption at the project site.

3.6.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

Construction activities would involve energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment. Fossil fuels to power construction vehicles and other energy-consuming equipment would be used during the proposed remediation process and installation of park amenities and landscape improvements. The types of equipment could include gasoline- and diesel-powered construction and transportation equipment. Implementation of the project BMPs would serve to prevent wasteful, inefficient, or unnecessary consumption of energy resources. Specifically, idling times of construction equipment would be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes. All construction equipment would be maintained and properly tuned in accordance with the manufacturer’s specifications. Once construction is complete, the project site would resume its existing use as a park and would not entail energy consumption. Therefore, the proposed project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation and a **less-than-significant impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

The State of California has routinely adopted legislation to address climate change and clean energy production that has resulted in efforts to increase the efficiency of vehicles, buildings, and appliances and to provide energy from renewable sources. As identified in Section 3.8, *Greenhouse Gas Emissions*, GHG emissions generated during construction would be below Air District–established thresholds and would not be expected to substantially conflict with existing California legislation adopted to reduce GHGs throughout the state. Therefore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and a **less-than-significant impact** would occur.

3.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems				X

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
where sewers are not available for the disposal of wastewater?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

References: Association of Bay Area Governments 2020.

3.7.1 Environmental Setting

EARTHQUAKES

Seismic events are unavoidable in the Bay Area. Weaknesses in the earth's crust where tectonic plates slip past each other associated with faults found in the region result in earthquakes. Earthquakes most typically result in shaking-related damage, but faults can also rupture the surface. Surface fault rupture occurs when movement on a fault breaks through to the earth's surface and almost always follow pre-existing faults. The project site has been determined probabilistically to experience violent shaking (Modified Mercalli Scale 9) during a seismic event. Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California. Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault, generally 50 feet. The project site is not in an Alquist-Priolo fault zone. The closest mapped Alquist-Priolo fault zone is associated with the North Hayward fault zone, approximately 2 miles east of the project site.

LIQUEFACTION

Liquefaction occurs when loose, water-saturated sediments lose strength and fail during ground shaking that occurs during a seismic event. Granular material is transformed from a solid state into a liquified state due to an increase in pore-water pressure that can occur during a seismic event. The project site has a very high susceptibility to experience liquefaction during a seismic event.

LANDSLIDE

Landslides tend to occur in weak soil and rock on sloping terrain. Rainfall-induced landslides are naturally occurring geologic phenomena, caused when winter rainstorms trigger fast-moving debris flows, or mudslides, and other slower-moving landslides. Flooding and landslides associated with severe storms have been among the most common disasters in the Bay Area.

Landslides typically occur during periods of higher-than-average rainfall, like El Niño winter seasons, and are more likely to occur in areas associated with the following landforms.

- On steep slopes
- On slopes made top-heavy by construction debris (e.g., road grading)
- On slopes that have been eroded by construction
- On slopes with poor drainage
- On slopes where vegetation has been burned, removed, or otherwise destroyed
- On slopes where landslides have previously occurred

The project site has been identified as primarily flat land not likely to have rain-induced landslides (Association of Bay Area Governments 2020).

3.7.2 Explanation of Checklist Answers

A.I) NO IMPACT

The project site is not located within an Alquist-Priolo fault zone. Therefore, the proposed project would not cause potential substantial adverse effects involving the 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, and **no impact** would occur.

A.II) LESS-THAN-SIGNIFICANT IMPACT

The project site, like all locations within the San Francisco Bay Area, is likely subject to strong seismic shaking in the event of a major earthquake. The proposed project would involve remediating the degraded landfill cap to prevent lead-contaminated soil from being exposed, as well as construction of park amenities and landscape improvements. Once construction is complete, the project site would resume its existing use as a park with enhanced features. No habitable dwellings are located at the project site, and none would be constructed as part of the proposed project. There would be no significant exposure of persons or structures to seismic risks as a result of the proposed project. Therefore, the proposed project would not cause potential substantial adverse effects involving strong seismic shaking and a **less-than-significant impact** would occur.

A.III) LESS-THAN-SIGNIFICANT IMPACT

The project site is located in an area mapped as being susceptible to liquefaction in the event of a seismic event. No habitable dwellings are located at the project site, and none would be constructed as part of the proposed project. Therefore, the proposed project would not cause potential substantial adverse effects involving liquefaction. A **less-than-significant impact** would occur.

A.IV) LESS-THAN-SIGNIFICANT IMPACT

The project site has been identified as primarily flat land not likely to have rain-induced landslides. Placement of rip rap as part of the proposed remediation process would further stabilize the closed landfill and reduce the risk of landslides. Therefore, the proposed project would not cause potential substantial adverse effects involving landslides and a **less-than-significant impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

The proposed remediation process would include erosion control measures such as rip rap and geofabric installation. Implementation of construction BMPs listed to limit erosion and compliance with the erosion control measures of the Storm Water Pollution Prevention Plan (SWPPP) required by the National Pollutant Discharge Elimination System (NPDES) Program would serve to avoid impacts related to soil erosion. Therefore, the proposed project would not result in substantial soil erosion or the loss of topsoil and a **less-than-significant impact** would occur.

C) LESS-THAN-SIGNIFICANT IMPACT

The project site is not located on known geologic unit or soils that are unstable. The proposed remediation process would improve the stability of the closed landfill. Therefore, the proposed project would not result in on- or off-site landslides, lateral spreading, liquefaction, or collapse during a seismic event as a result of instability and a **less-than-significant impact** would occur.

D) LESS-THAN-SIGNIFICANT IMPACT

The project site is a closed landfill capped with imported soils that are non-expansive. The proposed landfill cap restoration activities would include placement of additional non-expansive soils imported from off-site. Therefore, the proposed project would not create a substantial risk to life or property due to expansive soils and a **less-than-significant impact** would occur.

E) NO IMPACT

There are no public sanitary facilities located at the project site. No septic system or alternative wastewater disposal system is proposed as part of the project. Therefore, the proposed project would not have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater, and **no impact** would occur.

F) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

The proposed project would involve remediating the degraded landfill cap to prevent lead-contaminated soil from being exposed, as well as installation of park amenities and landscape improvements. The project site is a former landfill and the proposed project does not include excavation. Nevertheless, the remote possibility exists that fossils of potential scientific significance could be discovered during construction activities. Implementation of **Mitigation Measure GEO-1** would reduce this impact to a **less-than-significant impact with mitigation**.

> **Mitigation Measure GEO-1**: In the event that fossils or fossil-bearing deposits are discovered during construction, activity within 50 feet of the find shall be temporarily halted or diverted. The contractor shall notify a qualified paleontologist to examine the discovery. The paleontologist shall document the discovery, as needed, in accordance with Society of Vertebrate Paleontology standards, evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the project proponent determines that avoidance is not feasible, the paleontologist shall prepare a plan for mitigating the effect of the project based on the qualities that make the resource important. The plan shall be submitted to the East Bay Regional Park District for review and approval prior to implementation.

3.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

References: United States Environmental Protection Agency 2016, 2023; California Air Resources Board 2022b, 2022c.

3.8.1 Environmental Setting

Significant changes in global climate patterns have been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes while others are anthropogenic (i.e., created and emitted solely through human activities).

Regulated GHGs consist of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (California Health and Safety Code 38505). GHGs are commonly quantified in the equivalent mass of CO_2, denoted CO_2e, which takes into account the global warming potential of each individual GHG compound.

Carbon dioxide enters the atmosphere through the process of burning fossil fuels (coal, natural gas, and oil), solid waste, trees, and wood products, and as a result of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle. Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills. Nitrous oxide is emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste. Hydrofluorocarbons, PFCs, SF_6, and NF_3 are synthetic, powerful GHGs that are emitted from a variety of industrial processes. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as High Global Warming Potential gases ("High GWP gases"). HFCs and PFCs are sometimes used as substitutes for stratospheric ozone-depleting substances (e.g., chlorofluorocarbons, hydrochlorofluorocarbons, and halons). SF_6 is employed in electricity transmission and distribution and semiconductor manufacturing. NF_3 results from semiconductor manufacturing processes (California Air Resources Board 2022c). The most common GHG that results from human activity is CO_2, followed by CH_4 and N_2O.

CALIFORNIA'S GHG SOURCES AND RELATIVE CONTRIBUTION

California is the second largest emitter of GHG in the United States, surpassed only by Texas (United States Environmental Protection Agency 2023). However, California also has over ten million more people than the state of Texas. CARB released the latest update to the statewide GHG emissions inventory in 2022 for the year 2020 emissions. In 2020, California produced 369.2 million metric tons (MMT) of CO_2e GHG emissions, 35.3 $MMTCO_2e$ lower than 2019 levels and 61.8 $MMTCO_2e$ below the 2020 GHG limit of 431 $MMTCO_2e$. California's transportation sector is the single largest generator of GHG emissions, producing 36.8 percent of the state's total emissions. The industrial sector is the second largest source, comprising 19.9 percent. The electricity sector is California's third largest source of GHG emissions, comprising 16.1 percent of the state's total emissions. Other major sources of GHG emissions include commercial and residential development, agricultural operations, high global warming potential GHGs, and waste (California Air Resources Board 2022b).

HUMAN INFLUENCE ON CLIMATE CHANGE

Fossil fuel burning by day-to-day human activities has contributed a significant impact on climate change since the start of the Industrial Revolution. Human activities have caused an increase of atmospheric CO_2 concentration by more than 40 percent, with most of the increase occurring since 1970. An increase in the global average surface temperature by one degree Celsius has occurred since 1900. This change in temperature has been accompanied by many climate effects including warming of the ocean, causing a rise in sea level, a reduction in Arctic Sea ice, heatwaves throughout the planet. Detailed analyses have concluded that an increase in CO_2 and other GHGs has resulted in warming during the afore-mentioned period. Thus, continued emissions of GHGs would result in further climate change. How much of an impact GHG emissions have on climate change will depend on the amount of GHG emitted by human activity.

POTENTIAL CLIMATE CHANGE IMPACTS FOR CALIFORNIA

The EPA has issued a fact sheet documenting how climate change impacts California. It states that over the last century, Southern California has warmed about three degrees Fahrenheit with all the state becoming warmer. Heat waves are becoming more prevalent, causing snow to melt earlier in spring—and in Southern California, less rain is falling as well. The changing climate can impact water supply, increase the possibility for wildfires, and threaten coastal development and ecosystems. Anthropogenic-generated CO_2 emissions have increased by 40 percent since the late 1700s. Additionally, the increase of other GHGs has contributed to warming of the earth surface and lower atmosphere about one degree during the last 50 years. Areas that would be affected by climate change include snowpack, water supply, agriculture, wildfires and changing landscapes, human health, and sea level rise (United States Environmental Protection Agency 2016).

The Air District has established thresholds of significance for GHG emissions to define the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce GHGs throughout the state. Thus, by meeting established thresholds, the effects of a project are considered to be less than significant. The Air District GHG significance thresholds are presented in Table 9, *Air District GHG Significance Thresholds*.

Table 9 Air District GHG Significance Thresholds

Project Type	Construction (pounds/day)
Project Other Than Stationary Sources	Compliance with Qualified GHG Reduction Strategy OR 1,100 MT of CO_2e/year OR 4.6 MT CO_2e/service population/year (residents plus employees)

3.8.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

To determine whether the proposed project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, its resulting emissions were calculated using CalEEMod and compared against the Air District–established thresholds. A summary of the resulting GHG emissions, their comparison with established thresholds, and determination of significance are presented in Table 10, *Project Construction GHG Emissions*. Detailed GHG emissions resulting from the proposed project are included in Appendix C.

Table 10 Project Construction GHG Emissions

Calendar Year	CO_2e (MT)
2024 (MT/yr)	576.7
Threshold of Significance (MT/yr)	1,100
Significant?	**No**

Notes:
MT/yr = metric ton per year
CO2e = carbon monoxide equivalent

As presented in Table 10, the proposed project construction emissions of GHGs are below the Air District threshold of significance. Once construction is completed, the project site would resume its existing use as a park and would not emit any GHGs. Therefore, the proposed project would not generate GHG emissions that may have a significant impact on the environment and a **less-than-significant impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

As discussed above, the Air District has established thresholds of significance for GHG emissions to define the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce GHGs throughout the state. The proposed project emissions of GHGs are below the established Air District thresholds of significance. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases and a **less-than-significant impact** would occur.

3.9 Hazards/Hazardous Materials

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter-mile of an existing or proposed school?				X
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?			X	
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, will the project result in a safety hazard or excessive noise for people working or residing in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	

Would the project:	**Potentially Significant Impact**	**Less-than-Significant Impact with Mitigation Incorporated**	**Less-than-Significant Impact**	**No Impact**
h) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?			**X**	

References: Regional Water Quality Control Board 1984, 1986, 1998; EKI Environmental & Water 2018; California Department of Forestry and Fire Protection 2024.

3.9.1 Environmental Setting

The project site is listed on the Department of Toxic Substances Control's EnviroStor database as a State response–certified O&M (operation and maintenance) site with land use restrictions and on the RWQCB's GeoTracker database as an open remediation cleanup program site. Prior to acquisition by California State Parks / East Bay Regional Park District, the project site was used as a dumping ground for construction/demolition and industrial waste. The man-made fill was limited to dumping on the ground. No natural landforms were used for placement of the waste at the project site. The project site became known as Battery Point due to a large quantity of battery casings that were buried at the project site as during the 1950s and 1960s (EKI Environmental & Water 2018).

A 1984 Cleanup and Abatement Order was issued by the RWQCB requiring investigations and remedial measures for the property, including the remediation of lead-impacted San Francisco Bay sediments and shellfish beds. Cleanup was focused on the portion of Point Isabel north of the Hoffman Channel, as well as the Hoffman Channel and surrounding in San Francisco Bay sediments. The project site became the subject of an environmental cleanup in the 1980s under Abatement Order Number 84-006 used by the RWQCB (Regional Water Quality Control Board-San Francisco Bay 1984) that required preparation and implementation of a Remedial Action Plan (RAP) that required removal of battery casings and lead-impacted soils that were disposed of off-site, construction of a clay cap over the landfill and long-term monitoring of the shoreline and cap, with maintenance as required (EKI Environmental & Water 2018).

The project site is not within one-quarter mile of an existing or proposed school. The closest school is the Alvarado Adult School at 5625 Sutter Avenue, one-half mile northeast of the project site. The project site is not within two miles of an airport or within an existing or unadopted airport land use plan. The Oakland International Airport in Oakland is the closest airport, approximately 22 miles south of the project site. The project site is also not within the vicinity of a private airstrip. The Hayward Executive Airport in Hayward is the closest private airstrip, approximately 19 miles southeast of the project site.

3.9.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

During construction, hazardous materials, primarily fuel and lubricants, would be used by construction equipment. Implementation of project BMPs during construction would serve to avoid impacts from the transport, use, and disposal of hazardous materials. Specifically, hazardous materials necessary for construction would not be stored or used where they could enter Hoffman Channel, the San Francisco Bay, or the local stormwater management system. A spill prevention and control plan to minimize the chance of spilling hazardous materials used during construction would be prepared. Spill kits shall be present for any work adjacent to open waters. All spills of oil and other hazardous materials shall be immediately cleaned up and contained. Any hazardous materials cleaned up or used on-site shall be properly disposed of at an approved disposal facility. Once construction is completed, the project site would resume its existing use as a park and would not involve the routine transport, use, or disposal of hazardous materials. Therefore, the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and a **less-than-significant impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

As part of the proposed cap restoration, the project site would require preclearing of existing vegetation, which could result in limited disturbance of lead-contaminated soils. Implementation of project BMPs during construction would serve to avoid the accidental release of hazardous materials. As part of the construction BMPs, construction workers associated with the earthwork movement portion of the proposed project would be required to be trained and current with HAZWOPER standards for general industry and construction. Therefore, the proposed project would not 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, and a **less-than-significant impact** would occur.

C) NO IMPACT

The project site is not within one-quarter mile of an existing or proposed school. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter-mile of an existing or proposed school, and **no impact** would occur.

D) LESS-THAN-SIGNIFICANT IMPACT

The project site is listed as a hazardous materials site on the EnviroStor and GeoTracker databases. The proposed project would remedy cap deficiencies early in the construction sequence. The proposed project would result in a restored landfill cap that would cover exposed lead-contaminated soils at the project site, thus reducing the potential for hazard exposure to park users. Therefore, the proposed project would not create a significant hazard to the public or the environment and a **less-than-significant impact** would occur.

E) NO IMPACT

The project site is not within two miles of an airport or within an existing or unadopted airport land use plan. Therefore, the proposed project would not result in a safety hazard or excessive noise for people working or residing in the project area, and **no impact** would occur.

F) NO IMPACT

The project site is not within the vicinity of a private air strip. Therefore, the proposed project would not result in a safety hazard for people residing or working in the project area, and **no impact** would occur.

G) LESS-THAN-SIGNIFICANT IMPACT

During construction, all vehicles and stationary equipment would be staged on the project site and not on public roads to avoid blocking emergency access routes. Therefore, the proposed project would not impair or physically impact any adopted emergency response plan or evacuation plan and a **less-than-significant impact** would occur.

H) LESS-THAN-SIGNIFICANT IMPACT

The project site is not within the wildland-urban interface or a Fire Hazard Severity Zone (FHSZ). The nearest FHSZ is approximately 1.5 miles east of the project site. (California Department of Forestry and Fire Protection 2024). Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildfires, and a **less-than-significant impact** would occur.

3.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede				X

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

References: City of Richmond 2011; EKI Environment & Water 2019; Association of Bay Area Governments 2020; Regional Water Quality Control Board-San Francisco Bay 2021; East Bay Municipal Utility District 2023.

3.10.1 Environmental Setting

TOPOGRAPHY AND SOILS

The project site is part of the McLaughlin Eastshore State Park where there is relatively little topography. Elevation ranges from sea level to approximately 50 feet above mean sea level. Much of the McLaughlin Eastshore State Park consists of primarily artificial fill that is placed to the west of the shoreline. The project site is a closed landfill that was used as a dumping ground for construction/demolition and industrial waste. The man-made fill episode was limited to dumping on the ground. No natural landforms were used for placement of the waste at the project site.

HYDROLOGY AND DRAINAGE

The San Francisco Bay Estuary is on the northwest and western sides of the project site. This 1,600-square-mile estuary was formed where the fresh waters of the Sacramento and San Joaquin Rivers flow into Suisun Bay, then the San Pablo Bay, and finally empty into the San Francisco Bay, where fresh water mixes with salt water from the Pacific Ocean. The San Francisco Bay Estuary functions as the only drainage outlet for waters of the Central Valley and creates a natural topographic division between the northern and southern coastal mountain ranges.

The project site is in the Berkeley segment of the Central Bay subregion, which is one of four subregions within the San Francisco Bay. Major hydrologic features of the project site are the nearshore zone, shoreline, uplands, and creeks/channels. The nearshore zone is composed of shallow open water and mud and sand flats in the intertidal or subtidal zones that extend to the bay from the shoreline. The boundary along the shoreline edge where the project site is located is highly variable and influenced significantly by tidal fluctuation.

SURFACE WATER QUALITY

Surface water quality of the region is monitored by the RWQCB, according to stated goals in the 2007 Basin Plan as updated in 2021 (Regional Water Quality Control Board-San Francisco Bay 2021). The Basin Plan contains surface water quality objectives for bacteria, bioaccumulation, biostimulatory substances, color, dissolved oxygen, floating material, oil and grease, population and community ecology, pH, radioactivity, salinity, sediment, material that is suspended, material and that can settle, sulfide, tastes and odors, temperature, and toxicity. Stormflow-generated surface water is managed at the project site with contours directing stormflow to storm drain catch basins and outfalls into Hoffman Channel and the San Francisco Bay, respectively (EKI Environment & Water 2019).

GROUNDWATER

The City of Richmond is above the Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin (Basin Number 2-9.04) (City of Richmond 2011). The 77,800-acre East Bay Plain Subbasin is composed of unconsolidated sediments of Quaternary age (i.e., less than 1.6 million years old). Groundwater in Richmond is very close to the surface in the low elevation or Bay plain areas. No groundwater resources are present at the project site.

FLOOD HAZARDS

The Federal Emergency Management Agency (FEMA) prepares and distributes the Flood Insurance Rate Map (FIRMs) used in the National Flood Insurance Program (NFIP) to identify the locations of special flood hazard areas, including the 100-year floodplain. The project site is in a VE 100-year flood zone (Association of Bay Area Governments 2020). A VE flood zone is an area designated by FEMA as having a high risk of flooding from storm surges caused by hurricanes or other severe weather. These areas are identified as Special Flood Hazard Areas with a 1 percent chance of experiencing a flood. Flood hazards are higher due to fast-moving storm waves of three feet or higher.

Tsunamis are potentially destructive waves that result from seismic activity. Tsunamis are unexpected ocean wave events that occur when underwater seismic activity vertically displaces water, causing rapidly moving waves that can rise to great heights when they encounter the shore, resulting in loss of life and property destruction. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. Seiches can be created by winds, earthquakes, or tsunamis. Bodies of water such as reservoirs, ponds, lakes, or large aboveground storage tanks can experience seiche waves up to several feet in height during a strong earthquake. The water sloshes back and forth until the wave motion is dampened by friction. The project site is in a tsunami and seiche zone.

REGULATORY SETTING

There is a well-established regulatory framework of federal and State laws for protection of water quality and floodplain management that would apply to the proposed project. These regulations establish requirements for projects in flood-prone areas and water quality criteria for the protection of human health and the environment, including stormwater discharges to surface water.

Federal Regulations

Clean Water Act

The federal Clean Water Act (CWA) was enacted with the primary purpose of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters. The CWA directs states to establish water quality standards for all "waters of the United States" and to review and update such standards on a triennial basis. The EPA has delegated responsibility for implementation of portions of the CWA, including water quality control planning and control programs, such as the NPDES Program, the State Water Resources Control Board (SWRCB), and the RWQCB.

National Pollutant Discharge Elimination System

The goal of the NPDES nonpoint source regulations is to improve the quality of stormwater discharged to receiving waters to the "maximum extent practicable" through the use of BMPs. The NPDES permit system was established in the CWA to regulate point source discharges (a municipal or industrial discharge at a specific location or pipe) and certain types of diffuse discharges. As defined in the federal regulations, nonpoint sources are generally exempt from federal NPDES permit program requirements. Nonpoint pollution sources are diffuse and originate over a wide area rather than from a definable point. Urban stormwater runoff and construction site runoff, however, are diffuse sources regulated under the NPDES permit program because they discharge to receiving waters at discrete locations. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits.

State Regulations

Responsibility for the protection of water quality in California rests with the SWRCB and nine RWQCBs. The SWRCB establishes statewide policies and regulations for the implementation of water quality control programs mandated by federal and State water quality statutes and regulations. The RWQCBs develop and implement Water Quality Control Plans (Basin Plans) that consider regional beneficial uses, water quality characteristics, and water quality problems. In cases where the Basin Plan does not contain a standard for a particular pollutant, other criteria are used to establish a standard. Other criteria may be applied from SWRCB documents (e.g., the Inland Surface Waters Plan and the Pollutant Policy Document, California Toxics Rule) or from EPA water quality criteria developed under Section 304(a) of the CWA. Numeric criteria are required by the CWA for many priority toxic pollutants. To fill in the gap between the water quality control plans and CWA requirements, on May 18, 2000, the EPA promulgated the California Toxics Rule based on the Administrator's determination that numeric criteria are necessary in the State of California to protect human health and the environment. These federal criteria are numeric water quality criteria for priority toxic pollutants and other provisions for water quality standards, legally applicable in the State of California, for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the CWA.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act establishes the SWRCB and each RWQCB as the principal State agencies for coordinating and controlling water quality in California. Specifically, the Porter-Cologne Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and groundwater) and directs the RWQCBs to develop regional Basin Plans. Section 13170 of the California Water Code authorizes the SWRCB to adopt water quality control plans on its own initiative.

Waste Discharge Requirements

The water quality objectives are achieved primarily through the establishment and enforcement of waste discharge requirements (WDRs). All discharges of waste to waters of the State, including both point and nonpoint source discharges, are subject to regulation. Non-point source discharges are regulated under WDRs, waivers of WDRs, a basin plan prohibition, or some combination of these administrative tools. Discharges of waste directly to State waters would be subject to an individual NPDES permit, which also serves as a WDR. The RWQCBs have primary responsibility for issuing WDRs.

NPDES General Construction Activity Stormwater Permit (Construction General Permit)

The SWRCB permits all regulated construction activities under NPDES General Permit for Storm Water Discharges Associated with Construction Activity (Order No.2009-0009-DWQ, NPDES No. CAR000002) adopted September 2, 2009. Every construction project that disturbs one or more acres of land surface or that is part of a common plan of development or sale that disturbs more than one acre of land surface requires coverage under this Construction General Permit. To obtain coverage, the landowner or other applicable entity must file Permit Registration Documents prior to the commencement of construction activity, which includes filing a Notice of Intent, preparing and implementing a SWPPP, submitting other documents required by this Construction General Permit, and mailing the appropriate permit fee to the SWRCB.

Regional Regulations

San Francisco Bay Basin (Region 2) Water Quality Control Plan (SFB Basin Plan)

The San Francisco RWQCB implements a number of federal and State laws, the most important of which are the State Porter-Cologne Water Quality Control Act and the federal CWA. Discharges from the City to surface and ground waters are subject to the SFB Basin Plan water quality objectives for the designated beneficial uses (water quality standards). The Bay has designated beneficial uses of industrial service and process supply; ocean, commercial, and sport fishing; shellfish harvesting; estuarine habitat; fish migration; preservation of rare and endangered species; fish spawning, wildlife habitat, water contact recreation; noncontact water recreation; and, navigation.

Municipal NPDES Permit

One of the primary objectives of the regulations for nonpoint source discharges is the reduction of pollutants in urban stormwater discharge through the use of structural and nonstructural BMPs. The City of Richmond is permitted under a Phase I for municipal stormwater and urban runoff discharges under NPDES General Permit No. CA0029912, Water Quality Order No. 99-058 (Municipal NPDES Permit), and subsequent amendments for the Contra Costa County Flood Control and Water Conservation District, Contra Costa County, and 16 incorporated cities in the County that have joined to form the Contra Costa Clean Water Program. However, a tentative order has been prepared to cover six counties in the San Francisco Bay Region, including Contra Costa County, under a Regional General Permit (Municipal Regional Stormwater Permit). If adopted, in addition to existing provisions, this permit would include Low Impact Development (LID) requirements (Provision C.3.c.) and require limitations on increases in peak stormwater runoff rate and volume where such increased flow and/or volume is likely to cause increased erosion of creek beds and banks, silt pollutant generation, or other impacts to beneficial uses for areas not already subject to a hydrograph modification management plan/program, including the City of Richmond (Provision C.3.g.). LID is a stormwater management strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale treatment and hydrologic controls to more closely reflect predevelopment conditions and minimizes the need for large sub-regional and regional treatment control measures.

3.10.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

Project BMPs and BMPs identified in the SWPPP required by NPDES would be used to control any stormwater flow generated on-site during construction and serve to protect water quality surrounding the project site. During site preparation, clearance, and grading, water would be used for dust suppression. The project site would be graded as identified in the grading plan to ensure no impacts to the existing drainage that is on the northwest and western side of the project site. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface- or groundwater quality and a **less-than-significant impact** would occur.

B) NO IMPACT

No groundwater sources are present at the project site. Water that would be used during site preparation, clearance, and grading for dust suppression would likely be sourced from the City of Richmond. Water used by the City of Richmond is provided by the East Bay Municipal Utility District (EBMUD) and originates from the Mokelumne River watershed on the western slope of the Sierra Nevada Mountain range (East Bay Municipal Utility District 2023). Therefore, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, and **no impact** would occur.

C) LESS-THAN-SIGNIFICANT IMPACT

No natural streambed or river is present at the project site. During the remediation process, the current drainage pattern associated with the closed landfill would be temporarily altered as new cap material is added and the new surface is recontoured so that future stormwater flow is directed to drain catch basins and discharged via outfalls to Hoffman Channel and the San Franisco Bay.

CI)

During the remediation process, soil erosion both on- and off-site would be controlled using construction BMPs and BMPs identified in the SWPPP required by NPDES. Therefore, the proposed project would not result in substantial erosion or siltation on- or off-site.

CII)

During construction, construction BMPs and BMPs identified in the SWPPP required by NPDES would be incorporated to reduce the rate and amount of uncontrolled surface runoff. After construction, stormwater runoff generated on-site would be directed to the on-site drain catch basins and outfalls which would reduce any risks of both on- and off-site flooding. Therefore, the proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

CIII)

During the remediation process, stormwater flow would be controlled using construction BMPs and BMPs identified in the SWPPP required by NPDES. The new surface would be recontoured so that future stormwater flow is directed to the proposed on-site drain catch basins, which would be designed to capture and manage potential runoff that may originate from the new landfill cap. Therefore, the proposed project 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.

CIV)

During construction, stormwater flow would be managed using construction BMPs and BMPs identified in the SWPPP required by NPDES. Afterward, stormwater flow would be controlled and directed to the project site's drain catch basins and discharged via outfalls to Hoffman Channel and the San Franisco Bay. The project site is topographically higher than the mapped 100-year flood zone; therefore, the proposed project would not impede or redirect a 100-year flood event (Association of Bay Area Governments 2020).

Project BMPs and BMPs identified in the SWPPP required by NPDES would be used to control stormwater flow. Therefore, the proposed project would not alter the existing drainage pattern of the project site, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, and a **less-than-significant impact** would occur.

D) LESS-THAN-SIGNIFICANT IMPACT

Existing conditions of the landfill cap on the project site present an increased risk for release of pollutants during a 100-year flood event, tsunami, or seiche. Once implemented, the proposed remediated landfill cap would reduce the risk for the accidental release of contaminants originating from the landfill. Therefore, the proposed project would not increase risk of release of pollutants due to project inundation and a **less-than-significant impact** would occur.

E) LESS-THAN-SIGNIFICANT IMPACT

No groundwater resources are present at the project site. Water that would be used during site preparation, clearance, and grading for dust suppression would likely be sourced from the City of Richmond. Water used by the City of Richmond is provided by the EBMUD and originates from the Mokelumne River watershed located on the western slope of the Sierra Nevada (East Bay Municipal Utility District 2023). Once construction is complete, the project site would resume its existing use as a park. The proposed project would be subject to federal and State water quality regulations where applicable. Construction BMPs and BMPs identified in the SWPPP required by NPDES would serve to protect water quality surrounding the project site. Therefore, the proposed project would not conflict with implementation of a water quality control plan or a sustainable groundwater management plan and a **less-than-significant impact** would occur.

3.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Physically divide an established community?				X
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?			X	

References: City of Richmond General Plan 2012; East Bay Regional Park District Master Plan 2013.

3.11.1 Environmental Setting

The project site is located in the East Bay region of the San Francisco Bay within Contra Costa County in the City of Richmond. The project site is within the East Bay Regional Park District boundaries and therefore is within the East Bay Regional Park District's jurisdiction. Due to this, the proposed project is not subject to the City of Richmond's land use and zoning designations. The East Bay Regional Park has a Master Plan that was adopted in 2013 which establishes regional parkland classifications. The project site is classified as a Regional Shoreline in the 2013 Master Plan, which is defined in the 2013 Master Plan as an area that must contain a variety of natural environments and manageable units of tidal, near shore wetland and upland areas that can be used for scientific, interpretive, or environmental purposes (EBRP 2013). The project site is located along the Richmond Shoreline of the San Francisco Bay. Areas surrounding the project site also includes open space, and beyond these areas to the north, east, and south is urban development.

3.11.2 Explanation of Checklist Answers

A) NO IMPACT

The project site is currently used as a park and would resume operation as a park after the proposed remediation process and installation of park amenities and landscape improvements. The project site is located along the San Francisco Bay shoreline on the outlying western edge of the Richmond and is not located amidst an established community. The project site is separated from the nearest neighborhood by Hoffman Marsh and I-580 and the adjacent railroad. Therefore, the proposed project would not physically divide an established community, and **no impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

The proposed project would be subject to the East Bay Regional Park District Master Plan. The project site is classified as a Regional Shoreline in the East Bay Regional Park District Master Plan. The project site is currently used as a park and would resume operation as a park after the proposed remediation process and installation of park amenities and landscape improvements. Table 11, *Consistency Analysis of Relevant East Bay Regional Park District Master Plan Policies and the Proposed Project*, details relevant East Bay Regional Park District Master Plan (East Bay Regional Park District Master Plan 2013) policies and their consistency with the proposed project.

Table 11 Consistency Analysis of Relevant East Bay Regional Park District Master Plan Policies and the Proposed Project

Planning Elements and Policy Description	Statement of Consistency
NRM11: Park water resources will be used for beneficial purposes. Water quality will be monitored to comply with established standards. The District will participate in cooperative efforts to plan comprehensive watershed management and will adopt "best management practice" guidelines for District land use activities to minimize potential storm water pollution. The District will monitor land use planning and development activities by other agencies and cities to avoid potential adverse impacts to parkland from pollutants generated by off-site or upstream sources.	**Consistent.** During construction of the proposed landfill cap remediation and installation of park amenities and landscape improvements, a SWPPP detailing BMPs would be implemented to prevent pollutants generated during storm events from leaving the project site.
PA6: The District will comply with the requirements of the Americans with Disabilities Act and use the current edition of the California State Parks Accessibility Guidelines as its standard for making the improvements necessary to create accessible circulation, programs, and facilities throughout the Park District.	**Consistent.** The Point Isabel Regional Shoreline has ADA-compliant facilities, and existing conditions and access at the project site would be improved as part of the proposed project.
RFA1: The District will provide a diverse system of non-motorized trails to accommodate a variety of recreational users including hikers, joggers, people with dogs, bicyclists, and equestrians. Both wide and narrow trails will be designed and designated to accommodate either single or multiple users based on location, recreational intensity, environmental, and safety considerations. The District will focus on appropriate trail planning and design, signage, and trail user education to promote safety and minimize conflicts with users.	**Consistent.** The proposed project involves the restoration of the existing landfill cap. Once the landfill cap is restored and new park amenities and landscape improvements have been installed, the project site would resume its existing use as a park. The proposed project would provide enhanced opportunities to use the project site as an off-leash dog use area. Trails on top of the proposed landfill cap and signage at the two entrances of the park are proposed as part of the added park amenities.
PRPT8: A Regional Shoreline (one area or a group of smaller shoreline areas that are connected by trail or water access) must contain a variety of natural environments and manageable units of tidal, near shore wetland, and upland areas that can be used for scientific,	**Consistent.** The proposed project involves the restoration of the existing landfill cap. Once the landfill cap is restored and new park amenities and landscape improvements have been installed, the project site would resume its existing use as a park. The proposed project would provide enhanced

Planning Elements and Policy Description	Statement of Consistency
interpretive, or environmental purposes; and/or contain sufficient land and water to provide a variety of recreational activities, such as swimming, fishing, boating, or viewing. The Recreation/Staging Unit providing for public access and services may comprise no more than 30 percent of a Regional Shoreline.	opportunities to use the project site as an off-leash dog use area. Access to the San Francisco Bay on the west and northwest sides of the proposed project would be limited to pedestrian trails.

The continued use of the project site as a park would not conflict with the existing park classification as a regional shoreline. No changes to the classification of the project site would be required to implement the proposed landfill cap restoration and installation of park amenities. Therefore, the proposed project would not 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, and a **less-than-significant impact** would occur.

3.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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?				X
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?				X

References: City of Richmond 2012; United States Geological Survey 2023.

3.12.1 Environmental Setting

The project site was identified as a quarry in 1972 as a primary source of stone owned by the Berkeley Waterfront Co. that had been abandoned (United States Geological Survey 2023). No mineral production at the project site has been identified by the United States Geological Survey. The City of Richmond General Plan does not identify mineral resources at the project site (City of Richmond 2012).

3.12.2 Explanation of Checklist Answers

A) NO IMPACT

No mineral production at the project site has been identified by the United States Geological Survey. While there may have been mineral resources in the past, no mineral resources are currently identified at the project site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state, and **no impact** would occur.

B) NO IMPACT

The City of Richmond General Plan does not identify mineral resources at the project site. Therefore, the proposed project would not 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, and **no impact** would occur.

3.13 Noise

Would the project:	**Potentially Significant Impact**	**Less-than-Significant Impact with Mitigation Incorporated**	**Less-than-Significant Impact**	**No Impact**
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project 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, will the project expose people residing or working in the project area to excessive noise levels?				X

References: California Department of Transportation 2013; Google Earth Pro 2022.

3.13.1 Environmental Setting

EXISTING NOISE ENVIRONMENT

The existing noise environment in the project area is primarily influenced by traffic noise on I-580 and train operations on the Western Pacific and Amtrak rail line adjacent to and east of I-580. Secondary noise characteristics of the site include truck movements attributable to the industrial warehouse use to the south, San Francisco Bay Trail users, and birds.

Ambient noise monitoring was conducted around the project site from March 13 to 14, 2024. Figure 4, *Noise Monitoring Locations,* shows the six short-term (15-minute) and three long-term (24-hour) noise measurement locations. Short-term measurement results are detailed below and summarized in Table 12, *Ambient Short-Term Noise Measurements Summary*. See Appendix C, *North Point Isabel Cap Improvement Project Noise and Vibrational Technical Study*, for additional information regarding the noise study conducted for the proposed project.

Table 12 Ambient Short-Term Noise Measurement Summary

Location	L_{eq} (dBA)	L_{max} (dBA)
ST1 – Northern Hoffman Marsh Boundary	58.5	64.1
ST2 – Hoffman Marsh east of project site	64.8	71.1
ST3 – Adjacent to the San Francisco Bay Trail Bridge	62.5	68.1
ST4 – Point Isabel parking lot	65.3	73.8
ST5 – Hoffman Marsh east of the San Francisco Bay Trail parking lot	66.5	72.6
ST6 – Hoffman Marsh south of project site	60.7	74.2

Source: Appendix C.
Note: ST-1 is not included in this table because it is not located along the truck haul route.

- **Short-Term Location 1 (ST-1)** monitoring was conducted on the northern Hoffman Marsh Boundary. The measurement location was approximately 40 feet east of the San Francisco Bay. A 15-minute noise measurement began at 7:33 p.m. on Wednesday, March 13, 2024. The noise measurement was conducted close to dusk. The noise environment is characterized primarily by traffic along I-580, Western Pacific Rail horns, and bird activity nearby. Pedestrian and cyclist activity was observed to be less prominent during this time. Noise levels generally ranged from 59 to 64 dBA.

- **Short-Term Location 2 (ST-2)** monitoring was conducted east of the project site in the Hoffman Marsh approximately 140 feet from the trail. A 15-minute noise measurement began at 7:02 p.m. on Wednesday, March 13, 2024. The noise measurement was conducted approaching dusk. The noise primarily consisted of traffic along I-580, Western Pacific rail, distant plane noise, and various bird activity. In addition to traffic, sirens were audible during this measurement. Noise levels generally ranged from 65 to 71 dBA.

- **Short-Term Location 3 (ST-3)** monitoring was conducted adjacent to the trail. The measurement location was approximately 20 feet east of the park. A 15-minute noise measurement began at 6:48 p.m. on Wednesday, March 13, 2024. The noise environment is characterized primarily by traffic along I-580, pedestrians walking and chatting, joggers, cyclists, dogs barking on the trail and in the nearby park, Western Pacific Rail, and bird activity nearby. Pedestrian and cyclist activity was observed to increase along the trail. Dogs barking were also more audible during this time. Noise levels generally ranged from 63 to 68 dBA.

- **Short-Term Location 4 (ST-4)** monitoring was conducted adjacent to the Point Isabel Parking Lot. A 15-minute noise measurement began at 6:27 p.m. on Wednesday, March 13, 2024. The noise measurement was conducted approaching dusk time. The noise primarily consisted of parking lot activity, traffic along I-580, Western Pacific rail, dogs barking, people chatting and walking into the park, dog washer station activity, and birds chirping. Noise levels generally ranged from 65 to 74 dBA.

- **Short-Term Location 5 (ST-5)** monitoring was conducted adjacent to the trail. The measurement location was taken in Hoffman Marsh approximately 20 feet east of the trail near the ending point of Rydin Road. A 15-minute noise measurement began at 6:02 p.m. on Wednesday, March 13, 2024. The noise environment is characterized primarily by traffic along I-580, pedestrians walking and chatting, joggers, cyclists, dog activity on the trail and in the nearby park, Western Pacific Rail, light- and heavy-duty vehicles along Rydin Road, and bird activity nearby. Noise levels generally ranged from 67 to 73 dBA.

- **Short-Term Location 6 (ST-6)** monitoring was conducted in the Hoffman Marsh south of the project site. The measurement location was taken approximately 20 feet east of the trail and approximately 55 feet of Rydin Road. A 15-minute noise measurement began at 5:33 p.m. on Wednesday, March 13, 2024. The noise environment is characterized primarily by traffic along I-580, pedestrians walking and chatting, joggers, cyclists, Western Pacific Rail, light- and heavy-duty vehicles along Rydin Road, and bird activity nearby. Noise levels generally ranged from 61 to 74 dBA.

Long-term measurement results are detailed below and summarized in Table 13, Table 14, and Table 15, *Ambient Long-Term Noise Measurements Summary* for LT-1, LT-2, and LT-3 (respectively). Average hourly noise levels at sites LT-1, LT-2, and LT-3 are 66.4 dBA L_{eq}, 66.2 dBA L_{eq}, and 60.1 dBA L_{eq}, respectively.

- **Long-Term Location 1 (LT-1)** monitoring was conducted east of the trail adjacent to the entrance of the channel from Hoffman Marsh. The measurement location was approximately 50 feet east of the bridge crossing the channel. A 24-hour noise measurement was taken from Wednesday, March 13, 2024, to Thursday, March 14, 2024. The noise environment is characterized primarily by traffic along I-580, pedestrians walking and chatting, joggers, cyclists, dog activity on the trail and in the nearby park, Western Pacific Rail, and bird activity nearby. Noise levels generally ranged from 57 to 70 dBA L_{eq}.

- **Long-Term Location 2 (LT-2)** monitoring was conducted east of the trail and project site in the Hoffman Marsh. The measurement location was approximately 140 feet from the trail along the marsh berm. A 24-hour noise measurement was taken from Wednesday, March 13, 2024, to Thursday, March 14, 2024. The noise environment is characterized primarily by traffic along I-580, Western Pacific Rail, and bird activity nearby. Noise levels generally ranged from 55 to 70 dBA L_{eq}.

- **Long-Term Location 3 (LT-3)** monitoring was conducted east of the trail and in the northern portion of the Hoffman Marsh. The measurement location was approximately 280 feet from the trail. A 24-hour noise measurement was taken from Wednesday, March 13, 2024, to Thursday, March 14, 2024. The noise environment is characterized primarily by traffic along I-580, Western Pacific Rail, and bird activity nearby. Noise levels generally ranged from 51 to 64 dBA L_{eq}.

Table 13 LT-1 Ambient Long-Term Noise Measurements

Time	L_{eq} (dBA)	L_{max} (dBA)	Time	L_{eq} (dBA)	L_{max} (dBA)
6:00 AM	69.7	80	6:00 PM	66.9	77.2
7:00 AM	66.7	89.9	7:00 PM	67	80.4
8:00 AM	63.3	72.9	8:00 PM	66	78.2
9:00 AM	69	77	9:00 PM	65.3	73.1
10:00 AM	69.3	85.1	10:00 PM	65	78.2
11:00 AM	70.1	84	11:00 PM	63.7	78.8
12:00 PM	69.4	84	12:00 AM	62.3	77.1
1:00 PM	64.3	72	1:00 AM	63.2	78.4
2:00 PM	60.4	74.8	2:00 AM	62.3	73.7
3:00 PM	56.4	76.1	3:00 AM	63.7	74.1
4:00 PM	57	70.5	4:00 AM	67	78.1
5:00 PM	59	77.2	5:00 AM	68.9	76.1

Source: Appendix C.

Table 14 LT-2 Ambient Long-Term Noise Measurements

Time	L_{eq} (dBA)	L_{max} (dBA)	Time	L_{eq} (dBA)	L_{max} (dBA)
6:00 AM	69.6	78.9	6:00 PM	66.7	74.4
7:00 AM	66.7	83.5	7:00 PM	66.8	76.9
8:00 AM	63.2	75.1	8:00 PM	65.9	82.1
9:00 AM	69.2	76.8	9:00 PM	65.2	79.3
10:00 AM	69.3	90.1	10:00 PM	65.3	75
11:00 AM	69.6	78.9	11:00 PM	64	75.7
12:00 PM	69.4	80.7	12:00 AM	62.5	76.9
1:00 PM	63.4	73.2	1:00 AM	63.1	79.5
2:00 PM	59.4	76.3	2:00 AM	61.7	75.4
3:00 PM	55.2	71.6	3:00 AM	63.3	73.5
4:00 PM	55.1	69.6	4:00 AM	66.9	76.9

Time	L_{eq} (dBA)	L_{max} (dBA)	Time	L_{eq} (dBA)	L_{max} (dBA)
5:00 PM	59.2	72.1	5:00 AM	68.9	75.4

Source: Appendix C.

Table 15 LT-3 Ambient Long-Term Noise Measurements

Time	L_{eq} (dBA)	L_{max} (dBA)	Time	L_{eq} (dBA)	L_{max} (dBA)
6:00 AM	62.7	71.4	6:00 PM	59.9	70
7:00 AM	60.4	70.8	7:00 PM	60.5	76.1
8:00 AM	57.5	77.7	8:00 PM	59.3	72.3
9:00 AM	63.7	74.6	9:00 PM	59.3	80.2
10:00 AM	63.2	81.3	10:00 PM	59.1	68.6
11:00 AM	63.4	73.2	11:00 PM	57.4	72.2
12:00 PM	63	73.8	12:00 AM	56	70.5
1:00 PM	58	88.8	1:00 AM	57.1	74
2:00 PM	53.7	67.3	2:00 AM	55.9	70.9
3:00 PM	51.5	61.2	3:00 AM	56.7	72.1
4:00 PM	51	63.5	4:00 AM	60.1	75.8
5:00 PM	53.7	66.5	5:00 AM	61.7	71.1

Source: Appendix C.

Source: USGS, East Bay Regional Parks District; PlaceWorks 2024.

Figure 4
Noise Monitoring Locations

SENSITIVE RECEPTORS

Certain land uses are particularly sensitive to noise and vibration, including residential, schools, hospitals, and open space/recreation areas where quiet environments are necessary for enjoyment, public health, and safety.

The closest sensitive receptor location is the Hoffman Marsh across the San Francisco Bay Trail from the project, where nesting habitat of endangered/threatened species exists—habitat for California Ridgway's rail (*Rallus longirostris obsoletus*). The closest residential sensitive receptors are approximately 1,300 feet east of the project site across I-580.

Biological resources can be susceptible to adverse effects associated with noise exposure. See Section 3.4, *Biological Resources*, for an analysis of potential noise impacts to special-status species.

3.13.2 Explanation of Checklist Answers

As a result of the California Supreme Court decision regarding the assessment of the environment's impacts on projects (*California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)*, 62 Cal. 4th 369 (No. S 213478) issued December 17, 2015), it is generally no longer the purview of the CEQA process to evaluate the impact of existing environmental conditions on any given project. The direct effects of exterior noise from nearby noise sources relative to land use compatibility of a future project as a result of the proposed project is no longer typically a required topic for impact evaluation under CEQA. Generally, no determination of significance is required except for certain school projects, projects affected by airport noise, and projects that would exacerbate existing conditions (i.e., projects that would have a significant operational impact).

SIGNIFICANCE THRESHOLDS

Traffic Noise

A project will normally have a significant effect on the environment related to noise if it will substantially increase the ambient noise levels for adjoining areas. Most people can detect changes in sound levels of approximately 3 dBA under normal, quiet conditions, and changes of 1 to 3 dBA under quiet, controlled conditions. Changes of less than 1 dBA are usually indiscernible. A change of 5 dBA is readily discernible to most people in an outdoor environment. Based on this, a significant impact would occur if traffic noise increases the existing noise environment by the following:

- 1.5 dBA or more for ambient noise environments of 65 dBA CNEL and higher
- 3 dBA or more for ambient noise environments of 60 to 64 CNEL
- 5 dBA or more for ambient noise environments of less than 60 dBA CNEL

Construction Noise

The Federal Transit Administration (FTA) provides criteria for acceptable construction noise levels and recommends a daytime noise threshold of 80 dBA L_{eq} (eight hour) for residential uses. For the purposes of this analysis, the FTA criterion is applied to nearby residences to determine impact significance.

Stationary Noise

The City's noise ordinance establishes exterior noise levels based on receiving land use. For the purposes of this analysis, these exterior noise standards are used to determine impact significance at nearby sensitive residential receptors.

Vibration

The City of Richmond has not established specific limits for vibration. The FTA provides criteria for acceptable levels of groundborne vibration for various types of buildings. These criteria are shown in Table 16, *Groundborne Vibration Criteria.* For the purposes of this analysis, the FTA criterion is applied to nearby sensitive receptors to determine impact significance.

Table 16 Groundborne Vibration Criteria

Building Category		PPV (in/sec)
I.	Reinforced concrete, steel, or timber (no plaster)	0.5
II.	Engineered concrete and masonry (no plaster)	0.3
III.	Nonengineered timber and masonry buildings	0.2
IV.	Buildings extremely susceptible to vibration damage	0.12

Source: FTA 2018.
PPV = peak particle velocity

METHODOLOGY

Anticipated daily haul truck trip generation associated with the proposed project is used in this analysis to estimate haul truck traffic noise increases when compared to baseline noise levels. The proposed project's average daily trips are compared to the baseline ambient noise levels to determine the traffic noise increases. The construction noise analysis uses the Roadway Construction Noise Model (RCNM) based on an anticipated equipment mix for individual construction activities verified by the applicant. The simultaneous use of the top three loudest pieces of equipment for each construction activity is modeled from the acoustical center of the construction site to the nearest sensitive receptor property line. Groundborne vibration and vibration noise is determined using FTA methodology and reference vibration levels for typical construction equipment (FTA 2018).

A) LESS-THAN-SIGNIFICANT IMPACT

Construction Vehicles

The transport of materials to and from the construction site would incrementally increase noise levels along Rydin Road. Single-event haul truck pass-bys generate noise levels of approximately 84 dBA (SEL) at 50 feet with a maximum of 77 dBA (Lmax) (FHWA 2006). Proposed haul truck trips are modeled assuming an operating speed of 15 miles per hour over an 8-hour workday. Based on anticipated haul truck trip estimates, the project would generate up to 80 haul truck trips per day, 10 per hour for an 8-hour workday, or 20 one-way trips per hour. Short-term measurement sites ST-2 through ST-6 are used to represent the nearest potential nesting habitat areas in the Hoffman Marsh (see Section 3.4, *Biological Resources*).

The operation of up to 20 one-way haul truck trips per hour along Rydin Road and the bridge over the Hoffman Canal would result in an hourly noise level of 53.6 dBA Leq at 50 feet. Table 17, *Project Haul Truck Trip Analysis*, shows the ambient noise levels at short-term measurement locations, the combined noise level due to project haul truck trips, and the increase over ambient noise level attributable to project haul truck trips. As shown in Table 17, project haul trips would not exceed 60 dBA Leq. Therefore, the proposed project would not result in significant haul truck traffic noise impacts, and impacts would be **less than significant**.

Table 17 Project Haul Truck Trip Analysis

Site Measurement Location	Ambient L_{eq} (dBA)	L_{eq} Comparison (dBA)	Combined L_{eq} (dBA)	Increase Over Ambient L_{eq} (dBA)
ST-2	64.8	-11.2	65.1	0.3
ST-3	62.5	-8.9	63.0	0.5
ST-4	65.3	-11.7	65.5	0.2
ST-5	66.5	-12.9	66.7	0.2
ST-6	60.7	-7.1	61.4	0.7

Source: PlaceWorks, March 13, 2024.

Construction Equipment

Noise generated by on-site construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each phase of construction involves different types of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest several pieces of equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable.

The noise produced at each construction phase is determined by combining the L_{eq} contributions from the top three loudest pieces of equipment used at a given time, while accounting for the ongoing time-variations of noise emissions (commonly referred to as the usage factor). Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels of up to 85 dBA at 50 feet (FTA 2018). However, overall noise emissions vary considerably, depending on what specific activity is being performed at any given moment.

Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dBA per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and shielding effects), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site (site of each development phase) with different loads and power requirements.

Construction noise levels associated with the proposed project were modeled using RCNM from the edge of the construction site (which is conservative since construction equipment would move around the project site and would not remain at the edge of the construction site for prolonged periods of time) to the long-term noise measurement sites LT-1 through LT-3. Long-term noise measurement sites are used in the analysis to represent the nearest potential nesting habitat areas in the Hoffman Marsh (see Section 3.4, *Biological Resources*). Results are summarized in Table 18, *Proposed Project-Related Construction Noise, dBA L_{eq}*.

The nearest human noise-sensitive uses are more than 1,000 feet away, adjacent to I-580 and rail lines, and would not be exposed to project construction noise levels exceeding noise thresholds or cause a 3 dBA increase over the existing ambient noise levels and impacts would be **less than significant**.

To determine project construction activity at construction sites C1, C2, C3, and C4, shown in Figures 5a through 5g, *Construction Noise Contours*, construction noise levels were modeled based on construction site locations and the type of construction activity. Additionally, 66 dBA L_{eq} (Lt-1 and Lt-2) and 60 dBA L_{eq} (Lt-3) noise contours attributable to the different types of construction activity proposed for the project were modeled in different construction phases. Potential construction noise impacts to wildlife based on this analysis are addressed in Section 3.4, *Biological Resources*.

Table 18 Proposed Project-Related Construction Noise, dBA L_{eq}

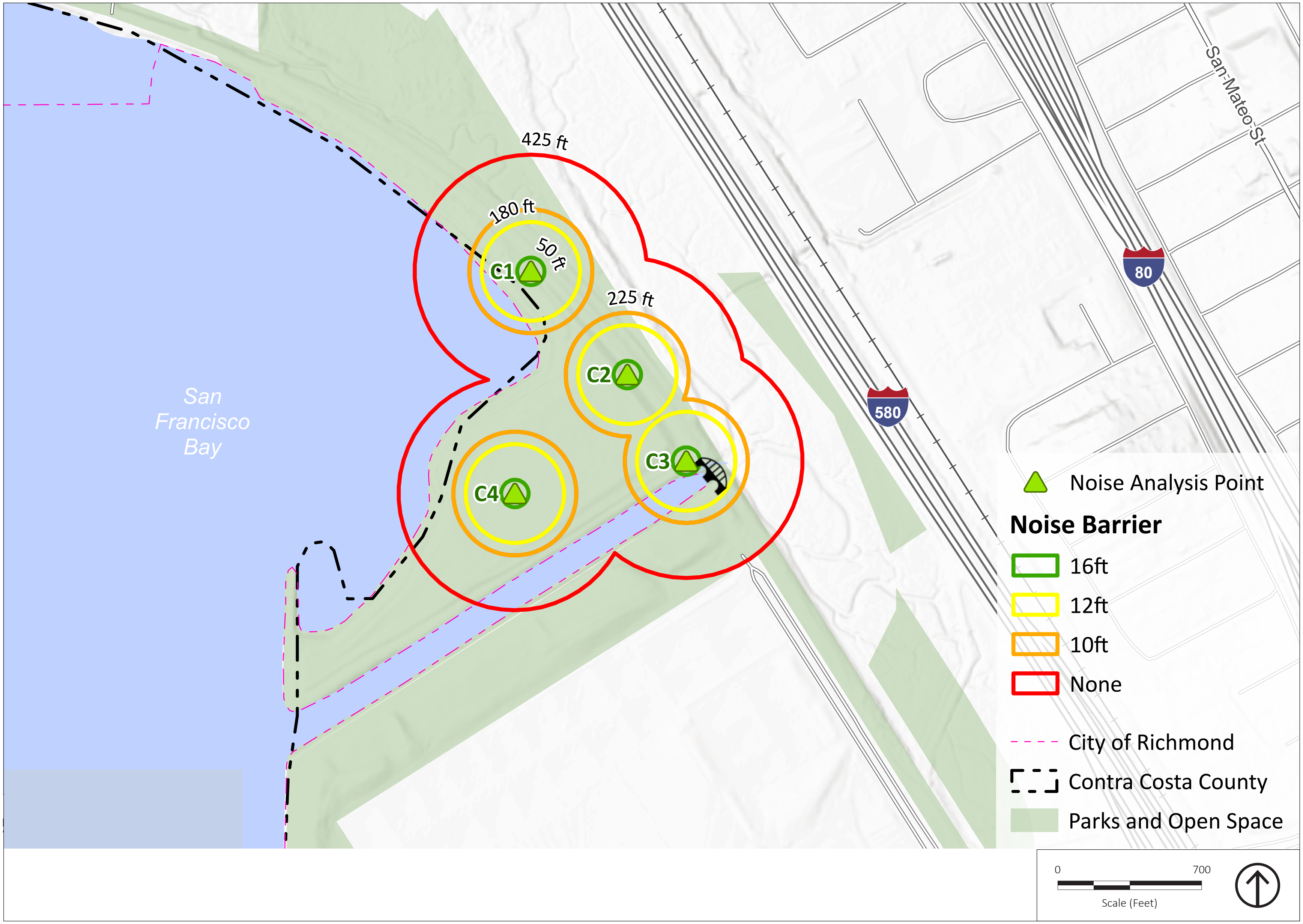
Construction Activity Phase	RCNM Output Noise Level			Combined Noise Level with Ambient			Increase over Ambient		
	LT-1	LT-2	LT-3	LT-1	LT-2	LT-3	LT-1	LT-2	LT-3
Rip rap	66.6	63.7	57.8	69.5	68.1	62.1	3.1	1.9	2.0
Trail Gravel	67.7	63.7	57.8	70.1	68.1	62.1	3.7	1.9	2.0
Grading 2 pieces of equipment	72.0	68.0	62.1	73.1	70.2	64.2	6.7	4.0	4.1
Grading 3 pieces of equipment	73.8	69.8	63.9	74.9	71.4	65.4	8.5	5.2	5.3
Landscape	64.4	60.4	54.5	68.5	67.2	61.2	2.1	1.0	1.1
Paving	66.6	62.6	56.7	69.5	67.8	61.7	3.1	1.6	1.6

Notes: Calculations performed with the FHWA's RCNM software are included in Appendix C.
Distance to sensitive habitat receptors is measured from the edge of the construction site to long-term measurement sites.

Park User Noise Impacts

The proposed project would improve the recreational area amenities and landscape adjacent to the existing San Francisco Bay Trail recreation area and habitat; however, an increase in park users is not expected with implementation of the proposed project. The proposed off-leash dog use area would be a similar use and consist of similar noise sources associated with the San Franciso Bay Trail and habitat area. Project park user impacts would remain the same in amount of users, and would not result in an incremental noise level increase over existing park user noise levels. In addition, the nearest noise-sensitive uses are more than 1,000 feet away, adjacent to I-580 and rail lines, and would not be exposed to park user noise levels exceeding noise thresholds or cause a 3 dBA increase. Therefore, the proposed project would not result in significant park user noise impact at off-site noise-sensitive uses.

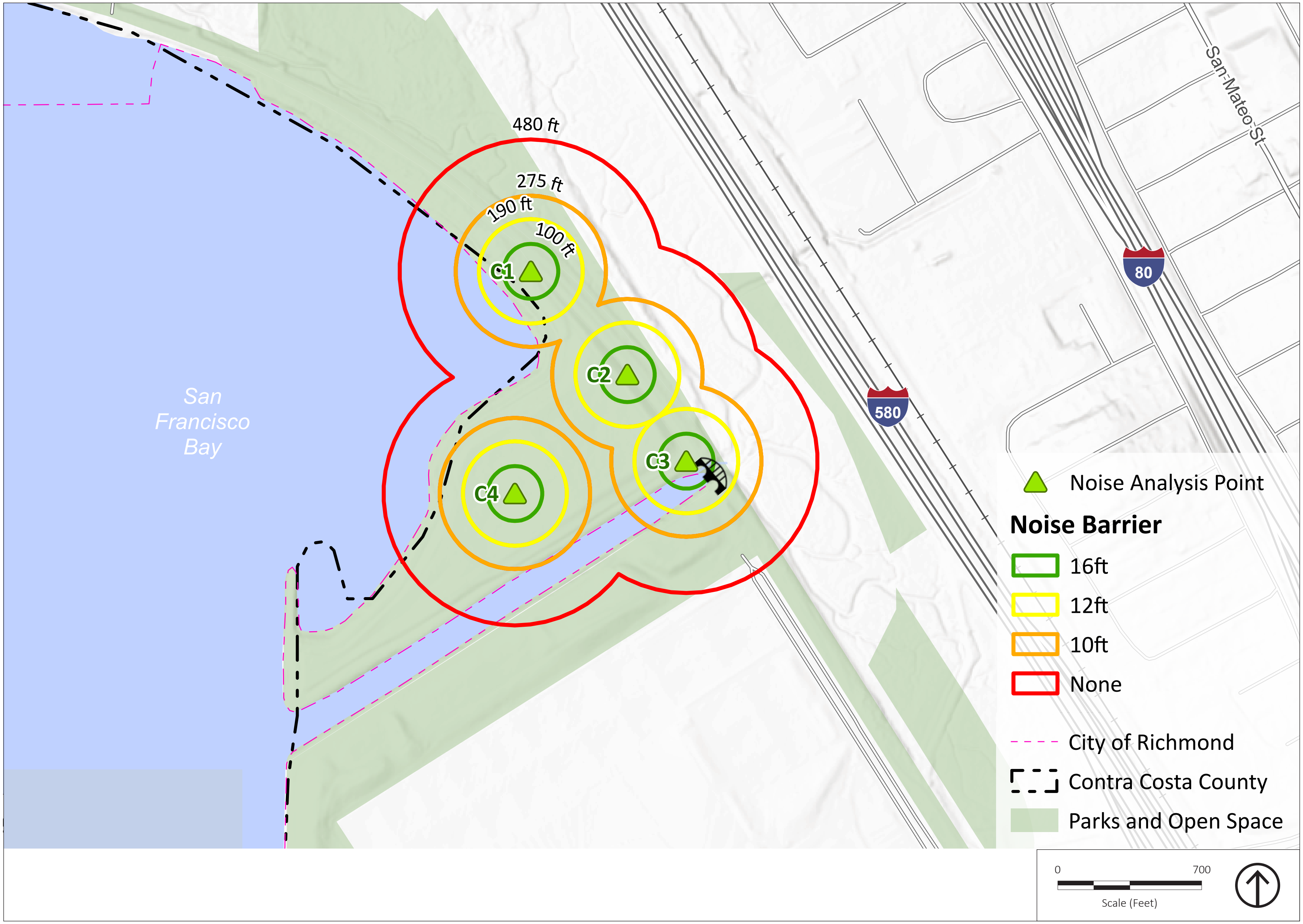
In addition, proposed project trips on the local roadway network would not result in an increase of traffic noise over existing as visitor amount would not change. Project trips would not result in a doubling of existing traffic volumes or result in a substantial increase in existing traffic noise levels. The traffic noise increase would be less than 1 dBA CNEL adjacent to uses that are not considered noise sensitive. Therefore, the proposed project would not result in significant traffic noise on the local roadway network, and impacts would be considered **less than significant**.



Source: USGS, East Bay Regional Parks District; PlaceWorks.

Figure 5a

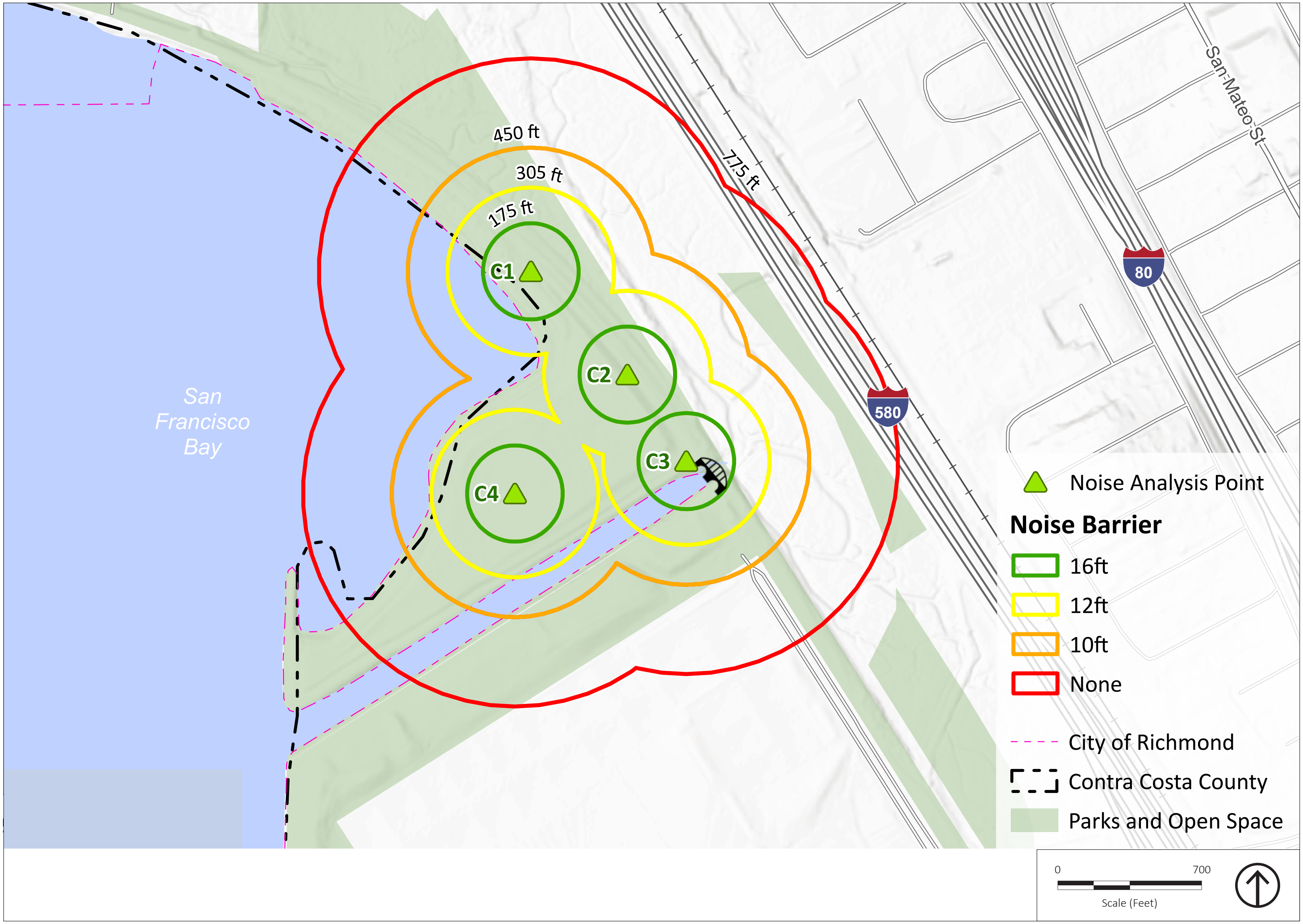
Noise Contours at 60 dBA L_{eq} with Rip Rap Equipment



Source: USGS, East Bay Regional Parks District; PlaceWorks.

Figure 5b

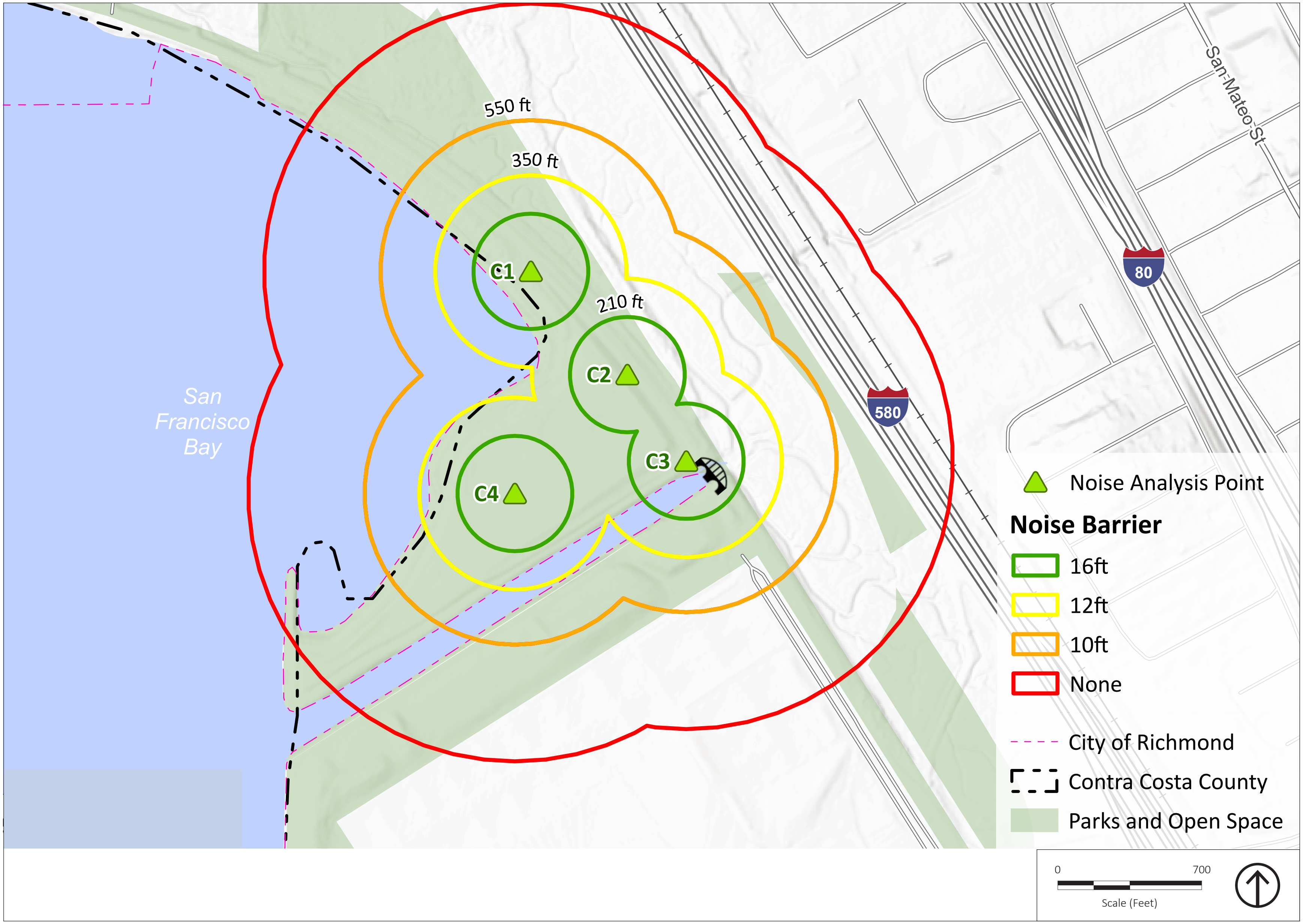
Noise Contours at 60 dBA L_{eq} with Trail Gravel Equipment



Source: USGS, East Bay Regional Parks District; PlaceWorks.

Figure 5c

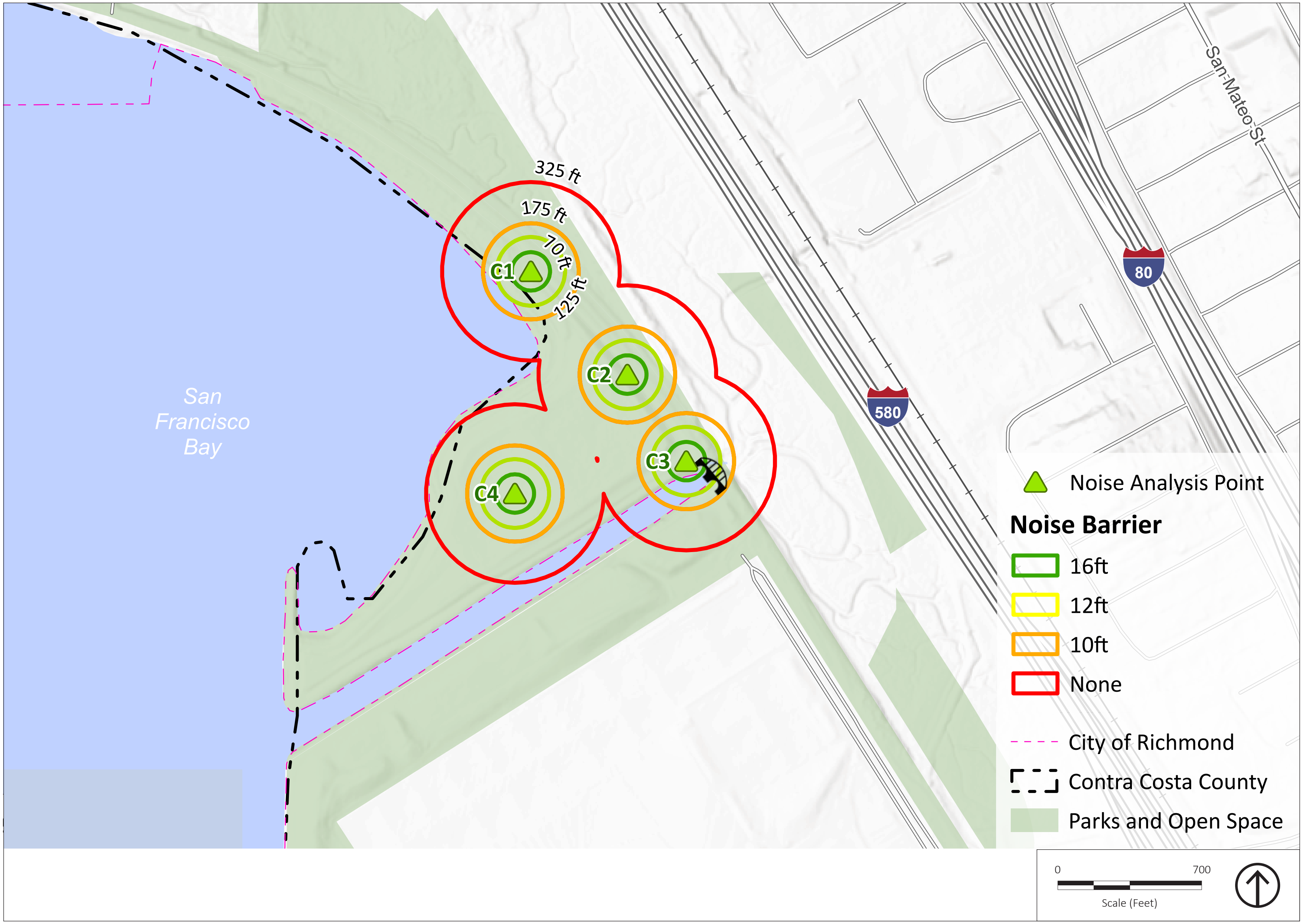
Noise Contours at 60 dBA L_{eq} with 2 Pieces of Grading Equipment



Source: USGS, East Bay Regional Parks District; PlaceWorks.

Figure 5d

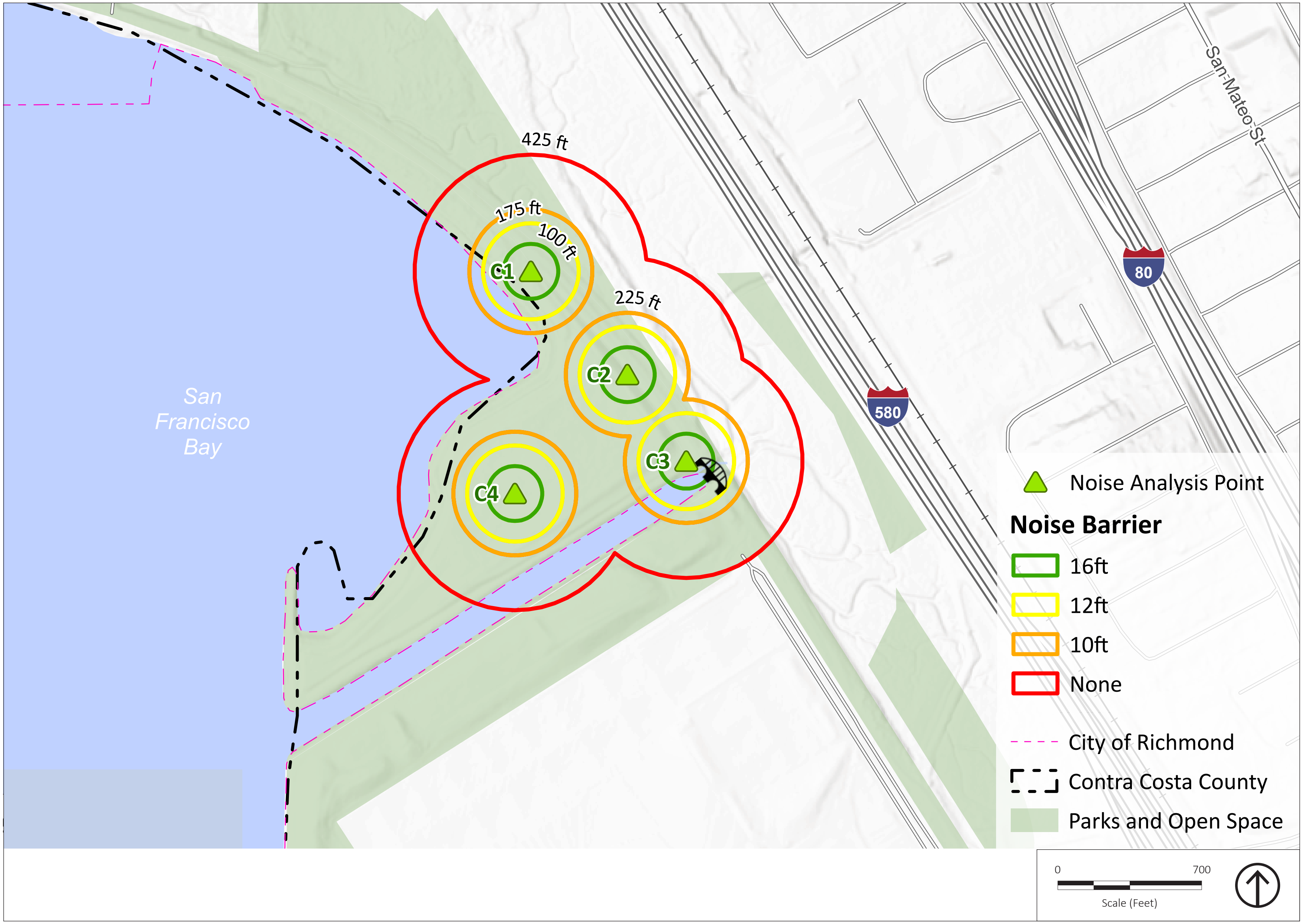
Noise Contours at 60 dBA L_{eq} with 3 Pieces of Grading Equipment



Source: USGS, East Bay Regional Parks District; PlaceWorks.

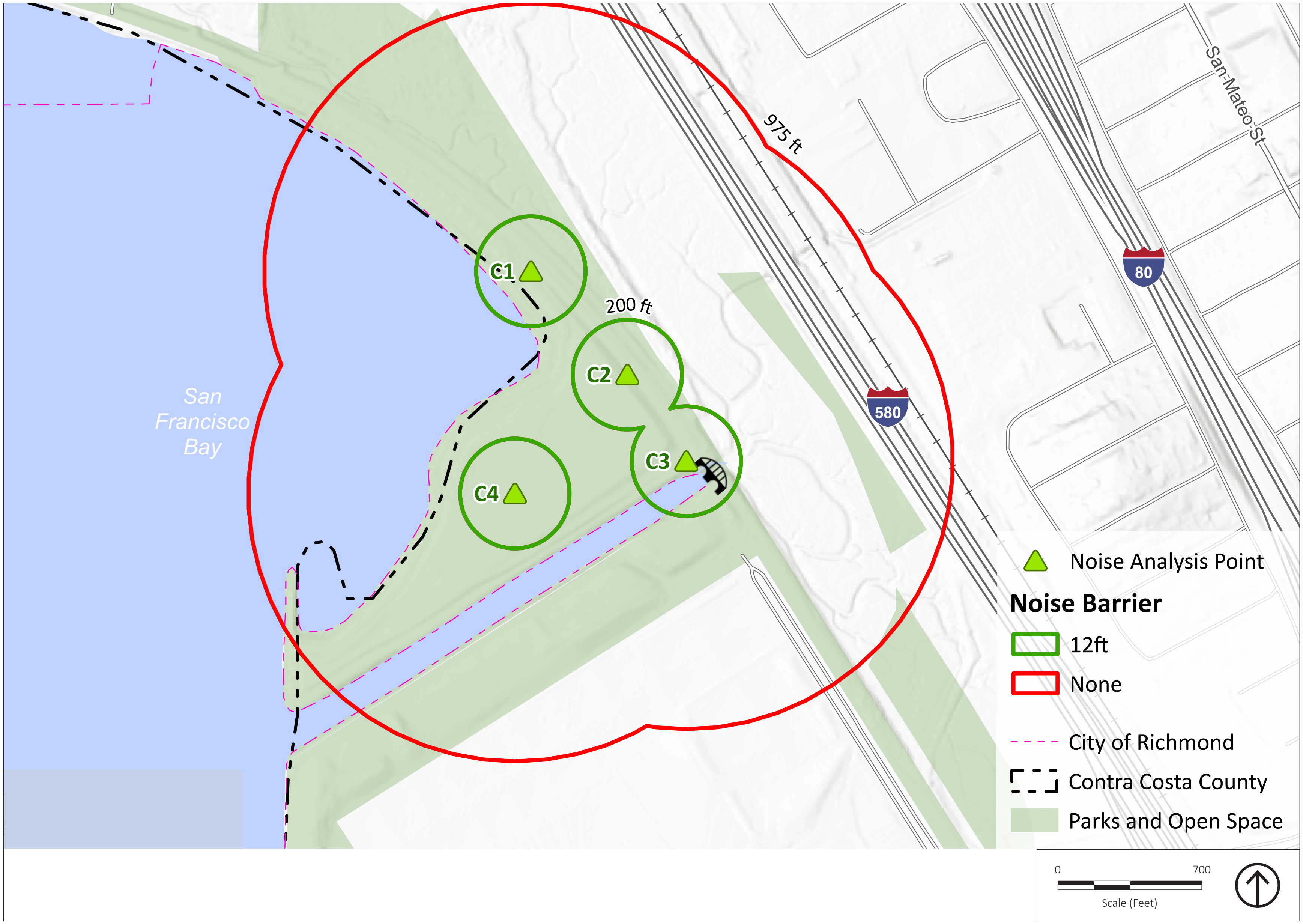
Figure 5e

Noise Contours at 60 dBA L_{eq} with Landscape Equipment



Source: USGS, East Bay Regional Parks District; PlaceWorks.

Figure 5f
Noise Contours at 60 dBA L_{eq} with Paving



Source: USGS, East Bay Regional Parks District; PlaceWorks.

Figure 5g

Noise Contours at 66 dBA L_{eq} with 3 Pieces of Grading Equipment

B) LESS-THAN-SIGNIFICANT IMPACT

During operation, the proposed project would not include any equipment or uses that would generate vibration. Therefore, this analysis focuses on construction-phase vibration.

Construction can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the construction site varies depending on soil type, ground strata, and receptor-building construction. The effects from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches the levels that can damage structures.

Table 19, *Proposed Project Vibration Levels (in/sec PPV),* summarizes vibration levels for typical construction equipment at a reference distance of 25 feet. Typical construction equipment can generate vibration levels ranging up to 0.089 inches per second (in/sec) PPV at 25 feet. Vibration levels at a distance greater than 100 feet would attenuate to 0.01 in/sec PPV or less.

Table 19 Proposed Project Vibration Levels (in/sec PPV)

Equipment	FTA Reference PPV (in/sec) at 25 feet	PPV (in/sec) at 100 feet
Large Bulldozer	0.089	0.011
Loaded Trucks	0.079	0.010
Jackhammer	0.035	0.004
Small Bulldozer	0.003	0.000

Source: FTA 2018.

The nearest structure to the site's construction activities, the United States Post Office Distribution Center, is more than 100 feet away. At this distance, construction vibration from a large bulldozer would attenuate to 0.01 in/sec or less, which would not exceed the threshold of 0.20 in/sec PPV for historic structures. Therefore, construction vibration would result in a **less-than-significant impact**.

C) NO IMPACT

The nearest airport to the project site is the Oakland International Airport, approximately 13 miles to the south. Other airports in the area include Buchanan Field to the east and San Rafael Airport to the northwest, approximately 15 miles and 14 miles away, respectively (AIRNAV 2022). Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels from airport-related noise and there would be **no impact**.

3.14 Population and Housing

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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 the extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Reference: California State Parks and Recreation 2002.

3.14.1 Environmental Setting

The project site is currently a recreational open space used as a park. The project site does not contain any housing units or population.

3.14.2 Explanation of Checklist Answers

A) NO IMPACT

Once the proposed remediation process is complete and park amenities and landscape improvements have been installed, the project site would resume its existing use as a park. Construction of residential structures is not proposed as part of the project. Therefore, the proposed project would not induce substantial unplanned population growth in the area, either directly or indirectly, and **no impact** would occur.

B) NO IMPACT

There are no residences at the project site. Therefore, the proposed project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and **no impact** would occur.

3.15 Public Services

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government 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:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?			X	
e) Other public facilities?				X

Reference: East Bay Regional Park District 2023; West Contra Costa Unified School District 2023.

3.15.1 Environmental Setting

FIRE SERVICES

The East Bay Regional Park District Fire Department (Fire Department) provides emergency services that includes fire suppression, search and rescue, fuels management and emergency medical response and care for all regional parks in the East Bay Regional Park District. The Fire Department includes a total of ten stations. The closest fire station to the project site is Fire Station #9 at 5755 McBryde Avenue, approximately 3.3 miles north of the project site (East Bay Regional Park District 2023).

POLICE SERVICES

The East Bay Regional Park District Police Department (Police Department) serves and patrols all 73 regional parks in Alameda and Contra Costa counties, including the project site (East Bay Regional Park District 2023). Headquarters for the Police Department are at 17930 Lake Chabot Road in Castro Valley, and the closest police station to the project site is approximately 1.8 miles northwest at 1701 Regatta Boulevard.

SCHOOLS

The closest school is the Alvarado Adult School at 5625 Sutter Avenue, approximately one-half mile northeast of the project site.

The West Contra Costa Unified School District (School District) covers the cities of El Cerrito, Richmond, San Pablo, Pinole and Hercules plus unincorporated areas of Bayview-Montalvin Manor, East Richmond Heights, El Sobrante, Kensington, North Richmond and Tara Hills (West Contra Costa Unified School District 2023). The School District operates the majority of the education facilities within the City of Richmond. The School District has 38 elementary schools, 6 middle schools, 7 high schools, 6 alternative and continuing education schools, and 1 special education early intervention school.

PARKS

The project site is part of the East Bay Regional Park District, a system of parklands in Alameda and Contra Costa counties to the east of San Francisco. The system includes 73 parks that span 125,000 acres, 1,250 miles of trails, and 55 miles of shoreline (East Bay Regional Park District 2023).

3.15.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

The proposed project would not include expansion of the park or induce any population growth, as noted in Section 3.14, *Population and Housing*. Once the proposed remediation process is complete and park amenities and landscape improvements have been installed, the project site would resume its existing use as a park. Therefore, no increase in fire services would be anticipated, and the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services, and a **less-than-significant impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

The proposed project would not include expansion of the park or induce any population growth, as noted in Section 3.14, *Population and Housing*. Once the proposed remediation process is complete and park amenities and landscape improvements have been installed, the project site would resume its existing use as a park. Therefore, no increase in police protection services would be anticipated, and the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services and a **less-than-significant impact** would occur.

C) NO IMPACT

Implementation of the proposed project, as stated in Section 3.14, *Population and Housing*, would not induce any population growth that could affect the number of students attending public schools. No residential structures are proposed as part of the project, and no permanent employment opportunities would be created that could lead to an increase in student populations. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered schools, and **no impact** would occur.

D) LESS-THAN-SIGNIFICANT IMPACT

The proposed project would not include expansion of the park or induce any population growth, as noted in Section 3.14, *Population and Housing*. Movement of equipment to and from the project site during construction may temporarily stop pedestrian and bicycle traffic using the San Francisco Bay Trail. However, the project BMPs require that the San Francisco Bay Trail remain open as much as possible during construction, and that orange construction fencing be installed on either side of the trail. Temporary closure of the trail during peak material delivery periods is to be publicized in advance along with detour plans. Pedestrian notices and caution signs are also to be installed. Once construction is completed, the project site would resume its existing use as a park. The proposed project would not affect existing neighborhood or regional parks or other recreational facilities. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities in order to maintain acceptable performance objectives for park services, and a **less-than-significant impact** would occur.

E) NO IMPACT

The proposed project would not involve construction of additional public facilities, and would not induce any population growth, as noted in Section 3.14, *Population and Housing*. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, need for new or physically altered public facilities, and **no impact** would occur.

3.16 Recreation

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

References: California State Parks and Recreation 2002; East Bay Regional Park District 2023.

3.16.1 Environmental Setting

The project site is part of the East Bay Regional Park District, a system of parklands in Alameda and Contra Costa counties to the east of San Francisco. The system includes 73 parks that span 125,000 acres, 1,250 miles of trails, and 55 miles of shoreline (East Bay Regional Park District, 2023). Point Isabel Park, located southeast of the project site, is one of the few designated off-leash dog use areas in the East Bay shoreline. Due to demand at Point Isabel Park, visitors have expanded their use into the project site (California State Parks and Recreation 2002). In addition to park users walking their dogs, the project site has the potential to be accessed by pedestrian and bicycle visitors who use the adjacent San Francisco Bay Trail.

3.16.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

The proposed project would involve remediating the degraded landfill cap to prevent lead-contaminated soil from being exposed, as well as installation of park amenities and landscape improvements. The project site would temporarily be closed to park users during construction. During this time, park visitors could continue to use Point Isabel Park that is located southeast of the project site. Once construction is complete, the project site would resume its existing use as a park with enhanced features. The proposed improvements may result in increased use of the project site, but the proposed remediation process would prevent substantial deterioration. Therefore, the proposed project would not 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 and a **less-than-significant impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

The proposed project would involve remediating the degraded landfill cap to prevent lead-contaminated soil from being exposed, as well as installation of park amenities and landscape improvements. The proposed project would not include expansion of the park, but rather improve and enhance future recreation at the project site. Therefore, the proposed project would not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment and a **less-than-significant impact** would occur.

3.17 Transportation

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

References: City of Richmond 2012.

3.17.1 Environmental Setting

The project site is located to the southwest of I-580 and northwest of the Central Avenue off-ramp. I-80 is located to the east of I-580. I-580 and Central Avenue have been identified as Routes of Regional Significance as they provide regional connections within the City of Richmond (City of Richmond 2012). A summary of the local transportation infrastructure is found as follows.

Interstate 580. I-580 connects the East Bay area of San Francisco Bay with Marin County to the north and the San Joaquin Valley region to the east.

Central Avenue. Central Avenue is a four-lane undivided east-west street in the southern portion of the City of Richmond. Central Avenue provides the northernmost access to the project site from its interchange with I-80. Within the project site vicinity, and west of I-580/ I-80, Central Avenue is a two-lane road with on-street parking that provides access to the Point Isabel Regional Shoreline Park and adjacent retail and retail/commercial land uses.

San Francisco Bay Trail. West of I-580/I-80, the San Francisco Bay Trail is a north-south bicycle and pedestrian route that allows continuous bicycle/pedestrian access along the entire length of the project site.

Point Isabel Regional Shoreline Park. Two existing parking lots serve Point Isabel and the project site: a 50-space lot off Rydin Road, and a 200-space lot along the west side of Isabel Street. In addition, on-street parking is allowed along Isabel Street and Central Avenue (adjacent to the existing retail/commercial uses).

3.17.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

Construction of the proposed project would be temporary and any additional traffic generated during the construction phase would not add to permanent traffic generated by the project site. Once construction is complete, the project site would resume its existing use as a park. No new roads or additional parking lots are proposed as part of the project. Therefore, the proposed project would not conflict with an applicable plan, ordinance, or policy that addresses circulation system and **a less-than-significant impact** would occur.

B) NO IMPACT

Senate Bill 743, codified in Public Resources Code Section 21099 and signed by the Governor in 2013, directed the Governor's Office of Planning and Research to identify alternative metrics for evaluating transportation impacts under CEQA. Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." Recently adopted changes to the CEQA Guidelines in response to Section 21099 include a new section (15064.3) that specifies that vehicle miles traveled (VMT) is the most appropriate measure of transportation impacts. A separate Technical Advisory issued by OPR provides additional technical details on calculating VMT and assessing transportation impacts for various types of projects.

VMT is a metric that accounts for the number of project generated vehicle trips and the distance of those trips. For development projects, the analysis of VMT is to assess whether a project or plan adequately reduces total VMT. The proposed project involves the restoration of a landfill cap and installation of park amenities. As the proposed project does not include development of the project site that would increase vehicle trips to and from the project site, a VMT analysis is not warranted. Therefore, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), and **no impact** would occur.

C) NO IMPACT

The proposed project would involve remediating the degraded landfill cap to prevent lead-contaminated soil from being exposed, as well as installation of park amenities and landscape improvements. Once construction is complete, the project site would resume its existing use as a park. The construction of new roads is not proposed as part of the project. Therefore, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses, **no impact** would occur.

D) LESS-THAN-SIGNIFICANT IMPACT

During construction, construction traffic and trucks carrying equipment, landfill cap soils and rip rap would travel to the project site most likely using I-580 and exit at Central Avenue. From Central Avenue, construction traffic would travel to the north to the project site using Ryden Road and would cross Hoffman Channel using an existing bridge. Construction activities that may temporarily restrict vehicular traffic flow along Ryden Road and Central Avenue and pedestrian/bicycle users of the San Francisco Bay Trail would be required to implement adequate measures to facilitate the passage of pedestrians, bicyclists, and vehicles through and/or around any required temporary road closures. All existing access to the project site would be maintained during construction. Therefore, the proposed project would not result in inadequate emergency access and a **less-than-significant impact** would occur.

3.18 Tribal Cultural Resources

Would the project:	**Potentially Significant Impact**	**Less-than-Significant Impact with Mitigation Incorporated**	**Less-than-Significant Impact**	**No Impact**
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:		X		
e) Listed or eligible for listing in the California Register of Historical Resources, or in a local		**X**		

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

References: N/A

3.18.1 Environmental Setting

North Point Isabel is an entirely artificial landform, composed of construction/demolition and industrial waste, that was constructed during the 1950s and 1960s and therefore would not have been part of the pre-contact or proto-contact tribal landscape. However, it is not impossible for the artificial landform to harbor tribal cultural resources from the historic period and/or modern era. However, the landform is located within ancestral waters and along the coastline. Ancestral lands and waters are important to the Chochenyo Ohlone people.

ETHNOGRAPHIC SETTING

The landscape (including, but not limited to the water, animals, vegetation, and the land) of the project site has been stewarded by California native people since time immemorial. Western academics and non-native ethnographers bestowed the linguistic terms ‘’Ohlone’’ and ‘’Costanoan’’ to refer to the native peoples who inhabited the region from where the San Joaquin and Sacramento rivers empty into the San Francisco Bay southward to Point Sur and spanned the San Francisco peninsula eastward, terminating around what is now considered the Central Valley, which includes the current project site. The term Costanoan is an anglicized version of the Spanish term, *Costaños*, which translates to ‘’coastal people.’’ Western researchers have often postulated that the term ‘’Ohlone’’ stems from a village site the Spanish documented as ‘’Oljon’’ from the San Mateo coast and was then ascribed to the broader geographic region. However, Native knowledge has indicated that the word Ohlone is a variant of the Sierra Miwok word indicating the direction west – ‘’O’lo’no wit’’ (Milliken et al. 2009). In general, today’s tribes often use the term ‘’Ohlone’’ to describe themselves. Therefore, this is the term used in this chapter. However, it is at the discretion of each individual and/or tribe to determine which term they identify with.

Multiple dialects make up the Ohlone language. Chochenyo, which is still spoken today, is the dialect within the vicinity of the project site (Levy 1978). Proto-contact ethnographic maps, somewhat informed by indigenous knowledge but wholly underpinned by a western paradigmatic framework, indicate the vicinity of the project site is within the territory of the Huchiun, or Xučyun, village (Levy 1978; East Bay Regional Park District 2018).

The term ''Huchiun'' first appears in a 1787 baptism for a five-month-old, who is described as a ''native of the other shore of the vicinity that they call Junchaque and the Nation Huchiun.” The Huchiun village territory is situated west of the Karkins and east of the San Francisco Bay, located within the Oakland-Richmond vicinity, encompassing Rodeo and Pinole creeks. Village residence, at least at the time of contact and based on Spanish records and accounts, appears to have been flexible and ephemeral, subject to change on a seasonal and yearly basis. By Spanish accounts, the Huchiun village was the largest East Bay village with a population of over 400 people (Milliken et al. 2009).

The importance of coastal waters and the shoreline to the Ohlone peoples are evident from the early accounts of the entire Ohlone ''frontage on ocean and bay'' being ''lined with shell deposits'' (Kroeber 1925). Along the Bayshore, ancestral Ohlone groups consciously and purposefully constructed monumental shell mounds, utilizing waste shell from thousands of meals to raise village sites out of the high tide zone. Marine resources (i.e., mammals, mollusks, avian, and flora) would have been employed for dietary, utilitarian (e.g., tools), economic (e.g., shell beads), and ceremonial (e.g., abalone shell pendants, etc.) use. Balsas, tule reed boats, facilitated fishing and the hunting of shorebirds. An anthropogenic fire regime shaped and enhanced the on-shore landscape (Panich 2020).

ETHNOHISTORY

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

Mexico’s independence from Spain in 1821 began the process of secularization of mission lands and ushered in another era of change. Although Spanish missionaries promised to one day return mission lands to the local Indigenous, few Ohlone ever received any land. Instead, they became serf-like laborers on non-Indigenous owned ranchos, with most of the Indigenous labor actually being coerced through the use of force (East Bay Regional Park District 2018; Madley 2014). Older boys and men worked as *vacqueros* while older girls and women worked as housekeepers, cooks, and childcare workers. Indigenous people endured another era of change when California became a state in 1850. Ohlone peoples (along with other California Indigenous peoples) were subject to state laws that legalized the indenture and de facto slavery of Indigenous people, leading to their kidnapping, buying, and selling. These laws also made it illegal for Indigenous people to testify in court, serve on juries, and vote. In 1863, the passage of the Emancipation Proclamation began to dismantle these laws; by 1924 California Indians were granted citizenship (Park District 2018).

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

Colonization (which began upon the arrival of the Spanish and continues into the American period), created barriers and restricted access ancestral land. In general, the non-native land management framework does not include a fire regime, but has historically embraced a fire suppression policy and a hands-off-nature viewpoint, guided by an idealized, pristine version of Nature, compared to which humans and cultural influences are viewed as separate and even negative (Nelson 2023). Ironically, the version of nature Western society has come to idealize, and is attempting to regain, is actually one that was carefully tended and created by Indigenous people, and specifically by the Ohlone and Bay Miwok in the east Bay Area.

East Bay coastal lands and the Bayshore waters continue to be important to the Ohlone, even as access remains a challenge. From 2005 through 2008, the organization Indian People Organizing for Change (IPOC), organized community peace walks around the San Francisco Bay Area to sacred shellmounds in order to raise awareness about protecting Native American sacred sites (Sheynin 2015). In March 2024, the West Berkeley Shellmound site was purchased by the City of Berkeley and transferred to the Sogorea Te' Land Trust, led by urban and indigenous women, on behalf of the Confederated Villages of Lisjan Nation (Shellmound 2024). Today's Ohlone tribes maintain their identities through their programmatic efforts to reach their goals (e.g., ancestral land stewardship); through their group social gatherings and internal governmental meetings; or for some, through their efforts to have their interests recognized by local representatives of federal, state, or county governments and special districts (Milliken et al. 2009). Land management decisions made in consultation and collaboration with tribes that are culturally and traditionally affiliated with the geographic region can help to restore tribal cultural traditions and relationships with the land.

ASSEMBLY BILL 52

California Assembly Bill (AB) 52 established a category of resources in the CEQA called ‘’tribal cultural resources’’ that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.

Tribal cultural resources are defined as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources, or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant. A cultural landscape that meets these criteria is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Historical resources, unique archaeological resources, or non-unique archaeological resources may also be tribal cultural resources if they meet these criteria.

AB 52 recognizes 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 the CEQA calls for 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 significant impact on those resources.

AB 52 sets up a tribal consultation process for projects initiated after July 1, 2015. Lead agencies are required to provide notice of the proposed projects to any tribe that is traditionally and culturally affiliated with the geographic area that requested to be informed by the lead agency, following PRC Section 21018.3.1(b). If, within 30 days, a tribe requests consultation, the consultation process must end before the lead agency can release a draft environmental document. Consultation with the tribe may include a discussion regarding the type of review necessary, the significance of tribal cultural resources, the significance of the project’s impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe. The consultation process will be deemed concluded when either: 1) the parties agree to mitigation measures, or 2) any party concludes, after a good-faith effort, that an agreement cannot be reached. Any mitigation measures agreed to by the tribe and lead agency must be recommended for inclusion in the environmental document. If a tribe does not request consultation, or to otherwise assist in identifying mitigation measures during the consultation process, a lead agency may still consider mitigation measures if the agency determines that a project will cause a substantial adverse change to a tribal cultural resource.

In an effort to identify potential tribal cultural resources within the site, the Park District contact the Native American Heritage Commission (NAHC) to request the AB 52 tribal consultation list and for a search of the Sacred Lands File for the site on November 6, 2023. Cody Campagne, Cultural Resources Analyst, responded on December 11, 2023, with a letter stating that the result of the SLF check through the NAHC was "positive." The NAHC also provided a list of tribes that are traditionally and culturally affiliated with the site.

The District sent letters regarding the project via certified mail with a return receipt and via electronic mail (email) on January 16, 2024. Tribes were requested to respond within 30 days (February 15, 2024). Pursuant to subdivision (r) of Section 6254 and Section 6254.10 of the Government Code, and subdivision (d) of Section 15120 of Title 14 of the California Code of Regulations, any information, including, but not limited to, the location, description, and use of the tribal cultural resources, submitted by a California Native tribe during the environmental review process for this project is not included in this environmental document and will not be disclosed without prior consent of the tribe that provided the information. Table 20 summarizes correspondence efforts and AB 52 requests and outcomes.

Table 20 Park District and Tribal Correspondence for AB 52 Consultation

Tribal Affiliation	Tribal Contact	Response
Amah Mutsun Tribal Band of Mission San Juan Bautista	Irene Zwierlein, Chairperson	No response.
Confederated Villages of Lisjan Nation	Corrina Gould, Chairperson	No response.
Confederated Villages of Lisjan Nation	Deja Gould, Language Program Manager	No response.
Confederated Villages of Lisjan Nation	Cheyenne Gould, Tribal Cultural Resource Manager	No response.
Guidiville Rancheria of California	Bunny Tarin, Tribal Administrator	No response.
Guidiville Rancheria of California	Michael Derry, Historian	Email bounced back on 1/18/2024. Park District staff called Mr. Derry on 1/22/2024, and he provided an alternate email address. The correspondence was re-sent on 1/22/2024. No response was received.
Indian Canyon Mutsun Band of Costanoan	Ann Marie Sayers, Chairperson	Email did not go through. Park District staff re-sent the correspondence to an alternate email address on-file for Chairperson Sayers.

Indian Canyon Mutsun Band of Costanoan	Kanyon Sayers-Roods, MLD Contact	No response.
Muwekma Ohlone Indian Tribe of the SF Bay Area	Monica Arellano, Vice Chairwoman	No response.
The Ohlone Indian Tribe	Andrew Galvan, Chairperson	No response.
The Ohlone Indian Tribe	Desiree Vigil, THPO	No response.
The Ohlone Indian Tribe	Vincent Medina, Cultural Leader	No response.
Wuksachi Indian Tribe/Eshom Valley Band	Kenneth Woodrow, Chairperson	No response.

3.18.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

No tribal cultural resources that are listed on or eligible for listing in the California Register or in a local register of historical resources as defined in Public Resources Code 5020.1(k) have been identified within the project site, which is an artificial landform that would not have been a part of the pre-contact landscape. However, the landform is located within ancestral waters and along the coastline. These areas were and continue to be important to the Chochenyo Ohlone people. In addition, it is not impossible for the artificial landform to harbor tribal cultural resources from the historic period and/or modern era. Therefore, ground-disturbing activities during construction of the proposed project could adversely affect tribal cultural resources, which is a potentially significant impact. Implementation of **Mitigation Measure TCR-1** would reduce this impact to a **less-than-significant impact with mitigation**.

Mitigation Measure TCR-1: If a previously unidentified tribal cultural resource is identified during project construction, in accordance with Public Resources Code Section 21084.3, the following measures shall be followed to minimize the potential significant adverse impacts:

- Avoidance and preservation of the resources in place, if feasible, including but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

- Protecting the cultural character and integrity of the resource.
- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.

- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Protecting the resource.

B) LESS-THAN-SIGNIFICANT IMPACT WITH MITIGATION INCORPORATED

The District did not identify any significant resources pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 within the project site. Because the project site comprises an artificial landform that would not have been a part of the pre-contact landscape, there is a low possibility that the project site contains a tribal cultural resource. However, the landform is located within ancestral waters and along the coastline. These areas were and continue to be important to the Chochenyo Ohlone people, and the landform could harbor tribal cultural resources from the historic period/modern era. Although there is a low likelihood to encounter a tribal cultural resource during project implementation, if a tribal cultural resource is identified during the project, it would be treated in accordance with **Mitigation Measure TCR-1**. Therefore, the project would result in a **less-than-significant impact with mitigation**.

3.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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, electrical power, natural gas, or telecommunications facility, the construction or relocation of which could cause significant environmental Impact?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	

Would the project:	Potentially Significant Impact	Less-than-Significant Impact 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 commitment?				X
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?			X	
e) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

References: City of Richmond 2023; East Bay Municipal Utility District 2023.

3.19.1 Environmental Setting

WATER SUPPLY

EBMUD is the drinking water service provider within the City of Richmond (East Bay Municipal Utility District 2023). EBMUD currently produces an average of 325 million gallons per day (MGD) from the Mokelumne River watershed, with a diversion point at Pardee Reservoir. In a year of normal precipitation, water users within the EBMUD service area use an average of 21 MGD. There are no potable water sources at the project site.

WASTEWATER

Wastewater treatment is managed by EBMUD collection systems that direct wastewater to their treatment plant in Oakland near the entrance of the San Francisco-Oakland Bay Bridge. The EBMUD provides wastewater primary treatment for up to 320 MGD and secondary treatment for up to 168 MGD. On average, about 63 million gallons of wastewater are treated everyday (East Bay Municipal Water District 2023).

SOLID WASTE

Waste generated at the project site is disposed of in waste receptacles that are managed and maintained by the East Bay Regional Park District. Solid waste services in the City of Richmond are provided by Richmond Republic Sanitary Services (City of Richmond 2023). Waste is collected and delivered to the Golden Bear transfer station and West Contra Costa sanitary landfill located at 1 Parr Boulevard in Richmond.

ELECTRICAL AND NATURAL GAS

Electricity and natural gas in the City of Richmond are provided by Pacific Gas and Electric Company (PG&E) (City of Richmond 2023). PG&E is based in Oakland and its primary business is the transmission and delivery of electrical energy. The company provides natural gas and electricity to approximately 16 million customers throughout a 70,000-square-mile service area in northern and central California.

TELECOMMUNICATIONS

Internet in the City of Richmond is provided by Comcast, who provides broadband and mobile services. Entertainment services within the City of Richmond are provided by DirectTV using satellite or internet streaming services. Telephone services in the City of Richmond are supported by AT&T (City of Richmond 2023).

3.19.2 Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

There are no sources of water, wastewater management, electricity, natural gas, or telecommunications at the project site. Waste debris generated during construction would be disposed of into closed-top trash bins that would be removed by Republic Sanitary Services. During site preparation, clearance, and grading, water used for dust suppression would be obtained from a local metered hydrant and applied at the project site using a water truck. No existing utilities would be relocated, and none would be constructed as part of the proposed project. Therefore, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facility, and a **less-than-significant impact** would occur.

B) LESS-THAN-SIGNIFICANT IMPACT

During site preparation, clearance, and grading, water used for dust suppression would be obtained from a local metered hydrant and applied at the project site using a water truck. Once construction is complete, no additional water resources would be needed. Therefore, the proposed project would have sufficient water supplies and a **less-than-significant impact** would occur.

C) NO IMPACT

The project site currently does not have public sanitary services, and none are proposed to be constructed as part of the project. During construction, portable toilets would be provided for workers. No wastewater treatment services would be required at the project site. Therefore, the proposed project would not result in a determination by the project-serving wastewater treatment provider that it does not have adequate capacity, and **no impact** would occur.

D) LESS-THAN-SIGNIFICANT IMPACT

Temporary waste debris generated during construction would be disposed of into close top trash bins that would be removed by Republic Sanitary Services and disposed of at the Golden Bear transfer station/West Contra Costa landfill. Once construction is complete, the project site would resume its existing use as a park. No new waste receptacles would be added as part of the proposed project because waste generation is not anticipated to exceed what is currently generated. Therefore, the proposed project would not 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, and a **less-than-significant impact** would occur.

E) LESS-THAN-SIGNIFICANT IMPACT

Temporary waste debris generated during construction would be disposed of into closed-top trash bins that would be removed by Republic Sanitary Services and disposed of at the Golden Bear transfer station/West Contra Costa landfill. Once construction is complete, the project site would resume its existing use as a park. Waste generated from park use is not anticipated to exceed what is currently generated. Management and disposal of waste generated by park users would be managed by East Bay Regional Park District in compliance with local and State regulations. Therefore, the proposed project would comply with federal, State, and local statutes and regulations related to solid waste, and a **less-than-significant impact** would occur.

3.20 Wildfire

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 Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
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?				X
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				X

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 Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
fire risk or that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result or runoff, post-fire slope instability, or drainage changes?				X

References: California Department of Forestry and Fire Protection, 2024.

3.20.1 Environmental Setting

Wildfire in the urban interface is a growing concern in the Bay Area, where wildfires in the past have claimed lives and destroyed thousands of structures. Wildfire is a common hazard that threatens public safety and property and can cause the following impacts.

- Cause damage to linear infrastructure causing power outages
- Adversely impact air quality during the duration of the fire
- Adversely impact water quality in watersheds impacted by wildland fires
- Damage natural environments with lasing impacts to slopes and soils that could lead to hill destabilization, erosion and landslide.

The project site is located within a Local Responsibility Area (LRA) and is not located in a Very High FHSZ. The closest Very High FHSZ in an LRA is approximately 1.5 miles to the east and is separated from the project site by dense residential and commercial developments. The nearest State Responsibility Area (SRA) is approximately 3 miles east of the project site, adjacent to the Very High FHSZ in an LRA (California Department of Forestry and Fire Protection 2024).

3.20.2 Explanation of Checklist Answers

A) NO IMPACT

As noted in Section 3.9, *Hazards and Hazardous Materials*, the proposed project would not impair or physically impact any adopted emergency response plan or evacuation plan. However, the project site is not located in or near an SRA or lands classified as very high FHSZ. Therefore, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and **no impact** would occur under this threshold.

B) NO IMPACT

The project site is located on primarily flat land and consists of little vegetation. The proposed project would not change prevailing winds. Additionally, the project site is not located in or near an SRA or lands classified as very high FHSZ. Therefore, the proposed project would not exacerbate wildfire risks, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors, and **no impact** would occur under this threshold.

C) NO IMPACT

The proposed project would involve remediating the degraded landfill cap to prevent lead-contaminated soil from being exposed, as well as installation of park amenities and landscape improvements. No new roads, fuel breaks, emergency water sources, power lines or other utilities are proposed as part of the project. Additionally, the project site is not located in or near an SRA or lands classified as very high FHSZ. Therefore, the proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment, and **no impact** would occur under this threshold.

D) NO IMPACT

As noted in Section 3.7, *Geology and Soils*, and Section 3.10, *Hydrology and Water Quality,* the proposed project would have less-than-significant impacts related to flooding and landslides. However, the project site is not located in or near an SRA or lands classified as very high FHSZ. Therefore, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result or runoff, post-fire slope instability, or drainage changes, and **no impact** would occur under this threshold.

3.21 Mandatory Findings of Significance

Would the project:	**Potentially Significant Impact**	**Less-than-Significant Impact with Mitigation Incorporated**	**Less-than-Significant Impact**	**No Impact**
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or		X		

Would the project:	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact
endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?			X	

References: N/A

Explanation of Checklist Answers

A) LESS-THAN-SIGNIFICANT IMPACT

The project site is currently used as a park and would resume operation as a park after the proposed remediation process and installation of park amenities and landscape improvements. All impacts to biological resources and geology and soils would be fully mitigated to less-than-significant levels with implementation of **Mitigation Measures BIO-1** through **BIO-9** and **Mitigation Measure GEO-1**. Therefore, the proposed project would not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory and the proposed project would result in a **less-than-significant impact with mitigation**.

B) LESS-THAN-SIGNIFICANT IMPACT

As discussed previously, the proposed project would not result in a significant impact that could not be mitigated to a less-than-significant level. The project site is currently used as a park and would resume operation as a park after the proposed remediation process and installation of park amenities and landscape improvements. The proposed project would not increase the population of the surrounding area. Therefore, the proposed project would not have impacts that are individually limited, but cumulatively considerable and a **less-than-significant impact** would occur.

C) LESS-THAN-SIGNIFICANT IMPACT

As discussed previously, the proposed project would not result in a significant impact that could not be mitigated to a less-than-significant level. Therefore, the proposed project would not have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly and a **less-than-significant impact** would occur.

4. REFERENCES

Association of Bay Area Governments

2020 Hazard Viewer. https://abag.ca.gov. Accessed on 30 November 2023

Bay Area Air District

2017 Final 2017 Clean Air Plan, Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area

California Air Pollution Control Officers Association

2022 California Emissions Estimator Model (CalEEMod). Version 2022.1.1.20

California Air Resources Board

2022a GHGs Descriptions & Sources in California. http://www.arb.ca.gov/cc/inventory/background/ghg.htm. Accessed in June 2022

2022b Maps of State and Federal Area Designations. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations, Accessed in November 2023

2022c October. California Greenhouse Gas Emissions for 2000–2020. Trends of Emissions and Other Indicators. https://ww2.arb.ca.gov. Accessed in November 2023

California Department of Conservation

2022 Important Farmland Finder. https://maps.conservation.ca.gov/dlrp/ciff/. Accessed on 19 March 2024

California Department of Fish and Wildlife

2023 California Natural Diversity Database Rarefind 5. Version 5.3.0

California Department of Forestry and Fire Protection

2024 FHSZ Viewer. https://egis.fire.ca.gov/FHSZ/. Accessed 19 March 2024

California Department of Transportation

2013 Technical Noise Supplement to the Traffic Noise Analysis Protocol

2023 California Scenic Highways. https://caltrans.maps.arcgis.com. Accessed on 13 November 2023

California Native Plant Society

2023 Rare Plant Inventory (online edition, v9.5). https://www.rareplants.cnps.org. Accessed on 27 November 2023

California State Parks and Recreation

2002 Eastshore State Park General Plan. Prepared for California Department of Parks and Recreation, East Bay Regional Park District, California State Coastal Conservancy

City of Richmond

2011 Draft Environmental Impact Report, Richmond General Plan 2030

2012 Richmond General Plan 2030

2023 City of Richmond Community Profile-Utilities. https://www.ci.richmond.ca.us/250/Utilities. Accessed 15 December 15, 2023

Contra Costa County

2005 Contra Costa County General Plan 2005-2020. January 18, 2005, Reprinted July 2010

East Bay Municipal Utility District

2023 https://www.ebmud.com. Accessed on 8 December 2023

East Bay Regional Park District (EBRPD)

2013 Master Plan 2013. Resolution 2013-07-159, Adopted July 16, 2013

2021 SF Bay Trail Risk Assessment and Adaption Prioritization Plan. https://www.ebparks.org/sites/default/files/SFBT-RAAPP-Draft-4-2021-web.pdf. Accessed on 12 June 2025.

2023 Public Safety. https://www.ebparks.org/public-safetys. Accessed on 13 December 2023

EKI Environmental & Water

2018 Preliminary Alternatives Analysis Report. McLaughlin Eastshore State Park North Point Isabel, Final Draft, December 2018

2019 Stormwater Data 2019-2020 Reporting Year Results, McLaughlin Eastshore State Park North Point Isabel-Richmond, California

Google Earth Pro

2022 Microsoft Windows (6.2.9200.0). Accessed 12 December 2023

Martin T.E., and G.R. Geupel

1993 Nest-Monitoring Plots: Methods for Locating Nests and Monitoring Success. J. Field Ornithol. 64(4):507-519

Pilling, A.R Site record for P-07-178. On file with the Northwest Information Center, Rohnert Park, California.

Regional Water Quality Control Board-San Francisco Bay

1984 Clean up and Abatement Order No. 84-006, 16 August 1984

1986 Cleanup and Abatement Order No. 85-008. 17 December 1986

1998 Cleanup and Abatement Order No. 98-072, 18 May 1998

2021 Triennial Review of the Water Quality Control Plan for the San Francisco Bay 2021 Staff Report. November 2021

State of California

2018 Sea level Rise Guidance. https://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf.

United States Census Bureau

2020 Decennial Census. https://data.census.gov/profile/Richmond_city,_California?g=160XX00US0660620.

United States Environmental Protection Agency

2016 What Climate Change Means for California. EPA 430-F-16-007.

2023 State CO_2 Emissions from Fossil Fuel Combustion, 1990-2018. https://www.epa.gov/sites/default/files/2020-10/documents/state_co2_emissions_from_fossil_fuel_combustion_1990-2018.pdf. Accessed Nov 2023.

United States Geological Survey

2015 Richmond Quadrangle, California, 7.5-Minute Series

2023 Mineral Resources Program, Point Isable (MRDS #10260412) STN (usgs.gov). Accessed 08 December 2023

West Contra Costa Unified School District

2023 WCCUSD at a Glance. https://www.wccusd.net. Accessed December 13, 2023

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