

---

Initial Study/Mitigated Negative Declaration

# **Alameda Main Street Ferry Terminal Refurbishment Project**

---

**NOVEMBER 2022**

*Prepared for:*

**SAN FRANCISCO BAY AREA  
WATER EMERGENCY TRANSPORTATION AUTHORITY**  
Pier 9, Suite III, The Embarcadero  
San Francisco, California 94112  
*Contact: Chad Mason*

*Prepared by:*

**DUDEK**

1102 R Street  
Sacramento, California 95811  
*Contact: Christine Fukasawa*



---

# Table of Contents

<b>SECTION</b>	<b>PAGE</b>
Acronyms and Abbreviations.....	iii
1 Introduction .....	1
1.2 California Environmental Quality Act Compliance .....	1
1.3 Lead Agency.....	1
1.4 Public Review Process .....	1
1.5 Summary of Potential Impacts .....	2
1.6 Environmental Permits.....	3
1.7 Document Organization .....	3
2 Project Description.....	5
2.1 Project Location.....	5
2.2 Project Purpose .....	5
2.3 Project Elements .....	5
2.4 Construction.....	6
2.5 Anticipated Permits and Approvals .....	7
3 Initial Study Checklist.....	9
3.1 Aesthetics .....	13
3.2 Agriculture and Forestry Resources .....	15
3.3 Air Quality.....	17
3.4 Biological Resources .....	26
3.5 Cultural Resources .....	35
3.6 Energy .....	40
3.7 Geology and Soils .....	47
3.8 Greenhouse Gas Emissions.....	51
3.9 Hazards and Hazardous Materials .....	58
3.10 Hydrology and Water Quality.....	62
3.11 Land Use and Planning .....	67
3.12 Mineral Resources .....	68
3.13 Noise .....	69
3.14 Population and Housing.....	73
3.15 Public Services .....	74
3.16 Recreation.....	76
3.17 Transportation .....	77
3.18 Tribal Cultural Resources.....	79
3.19 Utilities and Service Systems.....	81

3.20	Wildfire .....	84
3.21	Mandatory Findings of Significance .....	86
4	References and Preparers.....	89
4.1	References Cited .....	89
4.2	List of Preparers .....	90

**TABLES**

2-1	Responsible Agencies and Anticipated Permits and Approvals .....	8
3.3-1	Air Quality – Thresholds of Significance .....	19
3.3-2	Average Daily Construction Emissions.....	22
3.6-1	Project Construction Petroleum Demand.....	46
3.8-1	Estimated Annual Construction Greenhouse Gas Emissions.....	57

**FIGURES**

1	Project Location .....	91
2	Project Site .....	93

**APPENDICES**

A	Alameda Main Street Ferry Terminal Refurbishment Project Plans
B	Air Quality CalEEMod and Harborcraft Data
C	Alameda Main Street Ferry Terminal Refurbishment Project Biological Technical Report
D	WETA Alameda Main Street Ferry Refurbishment Project Preliminary Geotechnical Report
E	Hydroacoustic Assessment
F	Solid Waste Estimates

# Acronyms and Abbreviations

Acronym/Abbreviation	Definition
ACC	Advance Clean Cars Standards
AFV	alternative fuel vehicles
AMP	Alameda Municipal Power
AMS	Alameda Main Street
ATCM	Airborne toxic control measure
BAAQMD	Bay Area Air Quality Management District
BACT	Best Achievable Control Technology requirements
Basin Plan	San Francisco Bay Basin Plan
BCDC	San Francisco Bay Conservation and Development Commission
BMP	best management practice(s)
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy standards
CalGreen	Section 5.106 of the California Building Code
Cal/OSHA	California Occupational Safety and Health Administration
CARB	California Air Resources Board
CalEEMod	California Emissions Estimator Model
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CDC	California Department of Conservation
CEC	California Energy Commission
CGS	California Geological Survey
City	City of Alameda
CNEL	Community noise equivalent level
CNRA	California Natural Resources Agency
CO <sub>x</sub>	Oxides of carbon
CPT	Cone penetration test
CWA	Clean Water Act
DMG	Division of Mines and Geology
DPS	Distinct Population Segment
DTSC	Department of Toxic Substances Control
EBMUD	East Bay Municipal Utility District
EIR	Environmental Impact Report
EISA	Energy Independence and Security Action of 2017
EOP	Emergency operations plan
EPA	U.S. Environmental Protection Agency
ESU	Evolutionarily Significant Unit
FHSZ	Fire Hazard Severity Zone
FR	Federal Register

ALAMEDA MAIN STREET FERRY TERMINAL REFURBISHMENT PROJECT  
 INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Acronym/Abbreviation	Definition
HR	Hydrologic Region
I-(580, 880, etc.)	Interstate
IS/MND	Initial Study/Mitigated Negative Declaration
LCFS	Low Carbon Fuel Standards
LEV	Low emission vehicles
LRA	Local Responsibility Area
MFR	Materials Recovery Facility
MT	Metric ton
MWWTP	EBMUD Main Wastewater Treatment Plant
NAAQS	National Ambient Air quality Standards
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO <sub>x</sub>	Oxides of Nitrogen
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	Ozone
PM <sub>x</sub>	Particulate matter (2.5 [fine] to 10 [coarse] microns)
PRC	Public Resource Code
project	Alameda Main Street Ferry Terminal Refurbishment Project
RFS	Renewable fuels
ROG	Reactive organic gases
RWQCB	regional water quality control board
SB X	State Bill
SFFBAAB	San Francisco Bay Area Air Basin
SO <sub>2</sub>	Sulfur dioxide
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminants
USFWS	United States Fish and Wildlife Service
VHFHSZ	Very high hazard severity zone
WETA	San Francisco Bay Area Water Emergency Transportation Authority
ZEV	Zero emission vehicles

---

# 1 Introduction

This Initial Study/Proposed Mitigated Negative Declaration (IS/MND) evaluates potential environmental effects resulting from the Alameda Main Street (AMS) Ferry Terminal Refurbishment Project (project). Chapter 2, “Project Description” presents the detailed project information.

## 1.2 California Environmental Quality Act Compliance

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a “public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when: (a) The Initial Study shows that there is no substantial evidence...that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level.” In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design.

As described in the environmental checklist (Chapter 3), the project would not result in any unmitigated significant environmental impacts. Therefore, an IS/MND is the appropriate document for compliance with the requirements of CEQA. This IS/MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

## 1.3 Lead Agency

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. The Water Emergency Transportation Authority (WETA) is the CEQA lead agency because it is responsible for discretionary approval of the project.

## 1.4 Public Review Process

The purpose of this document is to present to decision-makers and the public information about the environmental consequences of implementing the project. This disclosure document is being made available to the public for review and comment. This IS/MND will be available for a 30-day public review period from November 30th, 2022 to December 30th, 2022.

The IS/MND is available for download and review at:

<https://weta.sanfranciscobayferry.com/current-projects>

Supporting documentation referenced in this document is available upon request from WETA.

Comments on the IS/MND should be addressed to:

San Francisco Bay Area Water Emergency Transportation Authority  
Pier 9, Suite III, The Embarcadero  
San Francisco, California 94112  
Contact: Chad Mason  
Email: [cmason@watertransit.org](mailto:cmason@watertransit.org)

If you have questions regarding the IS/MND, please call Chad Mason at: (415) 364-1745. If you wish to send written comments (including via e-mail), they must be postmarked by December 30th, 2022 at 5:00 PM. After comments are received from the public and reviewing agencies, WETA may (1) adopt the MND and approve the project; (2) undertake additional environmental studies; or (3) abandon the project. If the project is approved and funded, the project proponent may proceed with the project.

## 1.5 Summary of Potential Impacts

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the project. Based on the issues evaluated in that chapter, it was determined that the project would have either no impact or a less-than-significant impact related to most of the issue areas identified in the Environmental Checklist, included as Appendix G of the State CEQA Guidelines.

These include the following issue areas:

- Aesthetics
- Agriculture and Forest Resources
- Energy
- Geology/Soils
- Greenhouse Gas Emissions and Climate Change
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use/Planning
- Mineral Resources
- Noise
- Population/Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/Service Systems; and,
- Wildfire Hazard.



Potentially significant impacts were identified for air quality, biological resources, cultural resources, and tribal cultural resources; however, mitigation measures included in this IS/MND would reduce all impacts to a less-than-significant level.

## 1.6 Environmental Permits

As CEQA lead agency for the project, WETA will be responsible for adopting the MND and approving the project. Additionally, the following responsible agencies may have jurisdiction over elements of the project.

- California Department of Fish and Wildlife (CDFW)
- U.S. Army Corps of Engineers (USACE)
- National Marine Fisheries Service (NMFS)
- San Francisco Bay Regional Water Quality Control Board (RWQCB)
- San Francisco Bay Conservation and Development Commission (BCDC)

## 1.7 Document Organization

This IS/MND is organized as follows:

**Chapter 1: Introduction.** This chapter provides an introduction to the environmental review process. It describes the purpose and organization of this document and presents a summary of findings.

**Chapter 2: Project Description.** This chapter describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the project.

**Chapter 3: Initial Study Checklist.** This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if project actions would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially significant, an EIR would be required. For this project, however, none of the impacts were determined to be significant after implementation of mitigation measures.

**Chapter 4: References.** This chapter lists the references used in preparation of this IS/MND.

**Chapter 5: List of Preparers.** This chapter identifies report preparers.

INTENTIONALLY LEFT BLANK

---

## 2 Project Description

### 2.1 Project Location

The project is in the City of Alameda (City) in Alameda County, California. The City occupies approximately 10.6 square miles of land area immediately south of the City of Oakland and the Oakland-Alameda Estuary, east of the City of San Francisco, and north and east of the San Francisco Bay. Alameda Island makes up approximately 80 percent of the City's land area, with the remainder on Bay Farm Island across the San Leandro Channel (See Figure 1). Regional access to the City is provided by a variety of transportation modes. Interstate 880 (I-880) through Oakland—the nearest freeway to the project site—provides regional access for automobiles and transit. Regional traffic accesses the project site via State Route 61 (SR 61) through the Webster-Posey Tubes, the Park Street Bridge, the Miller Sweeney Bridge, and the High Street Bridge connecting the island of Alameda and the City of Oakland.

The project site is located at 2990 Main Street (Assessor Parcel Numbers 74-890-1-17, 74-1368-13-1, 74-1368-1, and 999-9999-999) and includes the existing AMS Ferry Terminal, which consists of a trestle, steel float structure, aluminum gangway, and bridge structure (See Figure 2). The site is designated under the General and Maritime Industry land use and zoned as General Industrial (M-2). Much of the project site is within the Oakland Inner Harbor, with a portion of the bridge structure extending onto the landside of the City. The project site is accessible by vehicle via Main Street and by ferry within the harbor. The project is within a developed area of the City and is bounded by the Oakland Inner Harbor to the north, industrial uses to the east, the San Francisco Bay Trail, AMS Ferry Terminal parking lot, and residential uses to the south, as well as the Main Street Dog Park and undeveloped uses to the east.

### 2.2 Project Purpose

To address structure aging, deterioration, and stabilization issues (i.e., compliance with current seismic safety requirements) associated with existing AMS Ferry Terminal components, WETA has identified the need to refurbish several portions of the terminal.

### 2.3 Project Elements

Project elements would include replacement of the existing bridge walkway and foundation, and replacement of the gangway, float, guide piles, and upgrades to utilities at the project site. All project features would be compliant with Americans with Disabilities Act (ADA) standards. These details rely on project plans (included as Appendix A) and are further described, below.

**Terminal Bridge and Foundation Replacement.** Project activities would involve demolition of existing bridge/walkway and bridge foundation and replacement with a new aluminum truss bridge. Onshore and landside support would be installed and would consist of a 48-inch (in) monopile and two 24-in pipe piles with cap beams, respectively.

**Gangway Replacement.** The project would include removal of the existing 60-foot gangway and replacement with an 80-foot covered aluminum gangway.

**Float Demolition/Replacement.** The existing terminal float would be removed and replaced-in-kind with a new steel float. Ramps that had been previously installed on the float would be removed, protected in place, and reused once

the new float is installed. Float ramps would be shifted to the west to provide additional room for a longer gangway. The four (4) existing 30-foot guide piles would be removed and replaced with four (4) new 36-in guide piles. To achieve a more safe, efficient berthing capacity and enable ingress and egress in a timely manner, float demolition/replacement activities would also involve installation of two (2) new 36-in steel pipe piles and two (2) 72-in donut fender piles.

**Utility Upgrades.** Utility upgrades associated with the project would involve replacement of existing razor equipment, installation of electrical service for replacement lighting, ramp controls, and outlets and a new potable water line. The new potable water line will connect to an existing line at the Ferry Terminal restroom facility. The new line will be used for intermittent terminal cleaning activities as needed. No other utility improvements are planned. The bridge, gangway, and float structures are designed to accommodate additional conduit related to an electric shorepower system that is to be constructed in the future as part of a separate project. The shorepower system will allow for charging of electric ferry vessels that will berth at AMS Ferry Terminal.

Overall, the footprint of the project site is expected to increase the AMS Ferry Terminal shade area by approximately 830 square feet. No changes in operational demand (i.e., an increase in ferry users) are anticipated, and no physical impacts beyond the project boundaries (see Figure 2) are anticipated as part of the project. Vehicular and pedestrian access to the AMS Ferry Terminal is not anticipated to change.

The water depth at the project site varies between 14-in to 28-in mean lower low water (MLLW). Most construction activities will occur above or at the waterline. The only elements that will extend below the mudline are the new piles that will have a maximum tip elevation of approximately 110-in MLLW.

## 2.4 Construction

Construction of the project is expected to occur over a period of approximately 4-6 weeks, beginning in Summer 2023 with an anticipated completion date of late Summer/Fall 2023. It is estimated that project construction would require 4-8 daily construction crew members, with the possibility for up to 15 onsite construction workers during major operations (e.g., concrete pours).

The following construction equipment is anticipated to be used during construction of the project:

- One (1) Derrick crane barge,
- One (1) skiff,
- One (1) support tug,
- One (1) support barge,
- One (1) vibratory hammer,
- One (1) impact hammer,
- One (1) delivery truck,
- One (1) concrete truck,
- One (1) pump truck
- Construction personnel trucks (approximately 3-6); and,
- One generator (1)/one (1) compressor.

Where feasible and available, diesel construction equipment would be powered by Tier 3 or Tier 4 engines as designated by the California Air Resources Board (CARB) and U.S. Environmental Protection Agency. In addition, if available for on-site delivery, diesel construction equipment would be powered with renewable diesel fuel that is compliant with California's Low Carbon Fuel Standards and certified as renewable by the CARB executive officer.

The project would require Bay fill removal (existing piles) and placement for installation of steel pipe piles for the new float and donut fenders, and bridge support. It is estimated that approximately 162 square feet (sf) of existing piles would be removed, and approximately 240 sf of steel pipe piles, fender piles, and bridge support piles would be installed. A total of 78 sf net fill of pilings (total piling installed minus pilings removed) would be installed. Once the new AMS Ferry Terminal is operational, no dredging would be required to accommodate vessels associated with the project.

Most project components would be fabricated off-site and transferred to the project site via barge. Debris generated during construction and site clearing activities would consist of the existing steel float, steel guide piles, gangway, bridge structure, bridge structure steel support system (H-Pile and steel beams), concrete approach slab, and miscellaneous electrical/mechanical conduit attached to the existing elements to be removed. In accordance with Section 5.408 of the CALGreen Code, the project would implement a Construction Waste Management Plan (CWMP) for recycling and/or salvaging for reuse of a minimum of 65 percent of nonhazardous construction/demolition debris. Solid waste collected throughout the City is hauled to the Davis Street Transfer Station in the City of San Leandro, where it is loaded into higher-capacity trailer trucks and hauled to Altamont Landfill in eastern Alameda County. Recyclable materials, which are collected from residential and commercial customers in separate bins, are hauled to ACI's Aladdin Materials Recovery Facility (MRF) and Transfer Facility in the City of San Leandro, which sorts, separates, and bundles the recyclables for sale to secondary markets (City of Alameda 2021a). Materials removed from the project site would be removed via a support barge in the Oakland Inner Harbor.

Consistent with Section 4-10.7 of the Alameda Municipal Code, noise-generating construction activities would be limited to occur between 7:00 a.m. and 7:00 p.m. Monday through Friday and 8:00 a.m. and 5:00 p.m. on Saturdays. It is anticipated that project construction would occur Monday through Friday, 7:00 a.m. to 3:30 p.m., with the potential for Saturday and Sunday work. In the event that weekend construction activities would be required, WETA would coordinate with the City of Alameda to obtain necessary permits/approvals.

Project construction staging would occur within the AMS Ferry Terminal parking lot. Before construction activities begin on any project component, signage would be posted surrounding the project site notifying the public of temporary parking lot closure. No street closures are anticipated. Because the project would be limited to the project site and construction/staging activities would not impede into the local roadways, a traffic control plan would not be implemented. The San Francisco Bay Trail, which traverses east-west through the AMS Ferry Terminal and project site, would remain open for pedestrian access with the potential for brief interruptions during certain construction activities, such as concrete installation for the new bridge structure landside cap beam. Access and use of the San Francisco Bay Trail would return to its original condition upon project completion.

## 2.5 Anticipated Permits and Approvals

WETA is the CEQA lead agency for this project and has sole authority to consider and approve the project and adopt the IS/MND. Table 2-1 lists agencies that may be required to issue permits or approve certain aspects of the project. This IS/MND is expected to be used to satisfy CEQA requirements of the listed responsible and/or trustee agencies.

**Table 2-1. Responsible Agencies and Anticipated Permits and Approvals**

Agency	Permit Approval
Water Emergency Transportation Agency (WETA)	CEQA Lead Agency and responsible for project approval/environmental document certification
City of Alameda	Encroachment Permit Structural Permit Building Permit Potential City approval for weekend construction activities
San Francisco Bay Conservation and Development Commission (BCDC)	Permit application/approval
California Department of Fish and Wildlife (CDFW)	Incidental Take Permit
U.S. Army Corps of Engineers (USACE)	Consultation/concurrence with Biological Assessment Permit and Authorization under the Clean Water Act Section 404 and Section 10 of the 1899 Rivers and Harbors Act
National Marine Fisheries Service (NMFS)	Incidental Harassment Authorization (IHA)
San Francisco Bay Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification through a Notice of Applicability under Order No. R2 2018, 0009 Waste Discharge Requirements for Maintenance of Overwater Structures

Data compiled by Dudek in 2022.

---

# 3 Initial Study Checklist

1. **Project title:** Alameda Main Street Ferry Terminal Refurbishment Project
2. **Lead agency name and address:**  
San Francisco Bay Area Water Emergency Transportation Authority  
Pier 9, Suite III, The Embarcadero  
San Francisco, California 94112
3. **Contact person and phone number:**  
Chad Mason, Project Manager/Senior Planner  
415.364.1745
4. **Project location:**  
2990 Main Street  
Alameda, California 94501
5. **Project sponsor's name and address:**  
(See #2, Lead agency name and address, above)
6. **General plan designation:**  
The project site's land use designation is General and Maritime Industry in the Alameda 2040 General Plan.
7. **Zoning:**  
The project site is zoned as General Industrial (M-2).
8. **Description of project:**  
Project elements include replacement of the existing bridge walkway and foundation; replacement of the gangway, float, guide piles, and upgrades to utilities at the project site. Additional details are provided in Chapter 2, "Project Description."
9. **Surrounding land uses and setting:**  
The project site is located within an urban area of the City of Alameda. Surrounding uses include the Oakland Inner Harbor to the north; industrial uses to the east (including a full-service ship repair company immediately adjacent to the site); the San Francisco Bay Trail and Main Street Dog Park to the west; and the AMS Ferry Terminal parking lot, and residential uses to the south.
10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**  
California Department of Fish and Wildlife, U.S. Army Corps of Engineers, National Marine Fisheries Service, San Francisco Regional Water Quality Control Board, San Francisco Bay Conservation and Development Commission (BCDC), and City of Alameda.
11. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?**  
The Confederated Villages of Lisjan Nation responded on August 18, 2022, requesting a copy of the Native American Heritage Commission (NAHC) response. WETA provided the Confederated Villages of Lisjan Nation with the NAHC response letter on August 25, 2022. Since August 25th, no further coordination has occurred.

### Environmental Factors Potentially Affected

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

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



**Determination (To be completed by the Lead Agency)**

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION 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 ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

11/30/22

Date

## Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analyses,” as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are “Less Than Significant With Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. The significance criteria or threshold, if any, used to evaluate each question; and
  - b. The mitigation measure identified, if any, to reduce the impact to less than significance

### 3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. AESTHETICS</b> – Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Regulatory Framework

##### Shoreline Space Public Access Design Guidelines

The San Francisco Bay Conservation and Development Commission (BCDC) is charged with maintaining public access, including visual public access (views to the San Francisco Bay [Bay] from other public spaces) within its jurisdiction. The BCDC developed public access objectives in the Shoreline Space Public Access Design Guidelines to provide, maintain and enhance visual access and visual quality to the Bay and shoreline by locating buildings, structures, parking lots and landscaping of new shoreline projects such that they enhance and dramatize views of the Bay and the shoreline from public thoroughfares and other public spaces, organizing shoreline development to allow Bay views and access between buildings (SFBCDC 2005).

Per these guidelines, the design character of public access areas should relate to the scale and intensity of the proposed development. Objectives related to visual access and visual quality may be accomplished by providing visual interest and architectural variety in massing and height in new buildings along the shoreline and/or using forms, materials, colors and textures that are compatible with the Bay and adjacent development.

## Environmental Setting

The project site is developed with the existing Alameda Main Street (AMS) Ferry Terminal, which consists of a trestle, steel float structure, aluminum gangway, and bridge structure. As described in section 2.1, “Project Location and Setting”, the project site is located on the northern portion of Alameda island, along the Oakland Inner Harbor shoreline, and extends within the harbor. The landside of the project site consists of various rocks, rip-rap, and dirt/sand.

The visual character of the project area includes undeveloped/open space, industrial uses, urban development, as well as residential uses. Structures surrounding the project site are one to two stories in height. Other built features include fencing, power lines, roads, designated parking lots, and pedestrian sidewalks. Though the site and its surroundings are developed, due to its location along the Oakland Inner Harbor, the project site offers unique vantage points of the Bay, including short- and long-distance scenic views towards the City of Oakland to the north, and towards the City of San Francisco to the west.

There are no designated or eligible scenic highways in the City of Alameda (City of Alameda 2021a). The nearest designated state scenic highway is Interstate 580 (I-580), located approximately 2.75 miles northeast of the project site (Caltrans 2018). Existing lighting within the project site includes terminal structure and security lighting. Overhead streetlights are also located within the AMS Ferry Terminal parking lot, directly south of the project site.

**a) *Would the project have a substantial adverse effect on a scenic vista?***

**Less-than-Significant Impact.** A scenic vista is generally defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality, or a natural or cultural resource that is indigenous to the area. The project site is located in within the City of Alameda, along the shoreline of the Oakland Inner Harbor and extending into the harbor. As previously described, due to the site’s location, unique vantage points of the Bay are available. Project construction activities would occur over a period of 4-6 weeks and would involve removal and replacement of existing terminal structures, as well as upgrades to terminal utilities. Once operational, the project site would be visually similar to existing AMS Ferry Terminal operations. The installation of replacement and new terminal features (i.e., donut fenders) would not impede or block short- or long- distance views available to or from the project site. Therefore, construction and operation of the project would not impede or adversely affect a scenic vista. Impacts would be less than significant, and no mitigation would be required.

**b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

**No Impact.** There are no scenic highways within the City of Alameda. The nearest designated scenic highway, I-580, is located approximately 2.75 miles northeast of the project site (Caltrans 2018). Furthermore, intervening development including the Oakland Inner Harbor, I-880, I-980, and a portion of the City of Oakland are located between the I-580 and the project site, obscuring long-range views. As such, project construction and operation would not be readily visible from I-580 and therefore would not degrade or damage existing scenic resources along the interstate. There would be no impact, and no mitigation would be required.

- c) *In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

Less-than-Significant Impact. The project is located in an urban area of the City of Alameda and is surrounded by both developed and open space uses. Project construction activities would involve ground disturbance associated with new and replacement terminal structures, including the terminal bridge, bridge foundation, gangway, and terminal float. Once operational, the project site would be visually similar to existing conditions. The project site is surrounded by developed uses and project construction activities would not substantially degrade the existing visual character of the project area. Impacts would be less than significant and no mitigation is required.

- d) *Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

Less-than-Significant Impact. Lighting is already present within the project site and surrounding area and consists of terminal and overhead parking lot light sources. Project implementation would include upgrades to the existing terminal and replacement of several terminal structures. Construction activities would be limited to daytime hours, between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 8:00 a.m. and 5:00 p.m. on Saturdays. Lighting for construction activities is not anticipated. No new lighting is proposed as part of the project, and once operational, lighting at the project site would be restored or replaced to pre-project conditions. Impacts would be less than significant, and no mitigation is required.

### 3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>II. AGRICULTURE AND FORESTRY RESOURCES</b> – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Framework

No plans, policies, regulations, or laws related to agricultural and forestry resources are applicable to the project.

### Environmental Setting

The project site is zoned as General Industrial (M-2). No surrounding sites or properties are zoned or used for agricultural uses (City of Alameda 2019).

The project site and surrounding area is identified as Urban and Built-Up Land by the California Department of Conservation’s (CDC’s) Farmland Mapping and Monitoring Program. Urban and Built-Up Land includes residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatments, and water control structures (CDC 2018). The City of Alameda was not identified as a reporting jurisdiction for Williamson Act contracts in 2021 (CDC 2022). There is no forest land or land zoned as forest land within the City of Alameda (Alameda 2021a).

- a-e) *Would the project 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; conflict with existing zoning for agricultural use, or a Williamson Act contract; 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)); result in the loss of forest land or conversion of forest land to non-forest use; or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?*

No Impact. The project site does not contain any lands designated as Important Farmland (i.e., Prime Farmland, Unique Farmland, or Farmland of Statewide Importance) or zoned as forest land or a timberland area. There are no active agricultural operations within or near the project site, and there is no Williamson Act contract associated with the project site. No existing agricultural or timber-harvest uses are located on or near the project site. There would be no impact, and no mitigation is required.

### 3.3 Air Quality

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

#### Regulatory Framework

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>),



particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM<sub>10</sub>), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM<sub>2.5</sub>), and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as criteria air pollutants.

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic noncancer health effects. A toxic substance released into the air is considered a toxic air contaminant (TAC). TACs are identified by federal and state agencies based on a review of available scientific evidence. Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations, combustion sources, and laboratories; mobile sources, such as automobiles; and area sources, such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and noncarcinogenic effects. Noncarcinogenic effects typically affect one or more target organ systems and may be experienced on either short-term (acute) or long-term (chronic) exposure to a given TAC.

## Federal

The federal Clean Air Act, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutant (HAP) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O<sub>3</sub> protection measures, and enforcement provisions. Under the Clean Air Act, NAAQS are established for the following criteria pollutants: O<sub>3</sub>, CO, NO<sub>2</sub>, SO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and lead.

## State

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to the California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O<sub>3</sub>, CO, SO<sub>2</sub> (1-hour and 24 hour), NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

## Local

While the Bay Area Air Quality Management District (BAAQMD) has initiated an update to their CEQA Air Quality Guidelines, the timeline for their release is unknown. Therefore, the BAAQMD CEQA Air Quality Guidelines (BAAQMD 2017a) remain as the applicable guidelines for the project and include significance thresholds for use in CEQA analyses. These BAAQMD significance thresholds are summarized in Table 3.3-1. The BAAQMD notes that these



thresholds are intended to maintain ambient air quality concentrations of these criteria air pollutants below state and federal standards and to prevent a cumulatively considerable contribution to regional nonattainment with ambient air quality standards. The TAC thresholds (cancer and noncancer risks) and local CO thresholds address localized impacts. These criteria air pollutant and TAC thresholds are supported by substantial evidence presented in the BAAQMD’s Revised Draft Options and Justification Report (BAAQMD 2009).

**Table 3.3-1. Air Quality - Thresholds of Significance**

Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO <sub>x</sub>	54	54	10
PM <sub>10</sub>	82 (exhaust)	82	15
PM <sub>2.5</sub>	54 (exhaust)	54	10
PM <sub>10</sub> /PM <sub>2.5</sub> (fugitive dust)	Best Management Practices	None	
Local CO	None	9.0 ppm (8-hour average, 20.0 ppm (1-hour average)	
Risks and Hazards (Individual Project)	Compliance with Qualified Community Risk Reduction Plan or Increased cancer risk of >10.0 in a million Increased noncancer risk of >1.0 Hazard Index (Chronic or Acute) Ambient PM <sub>2.5</sub> increase >0.3 µg/m <sup>3</sup> annual average Zone of Influence: 1,000-foot radius from property line of source or receptor		
Risks and Hazards (Cumulative)	Compliance with Qualified Community Risk Reduction Plan or Cancer risk of >100 in a million (from all local sources) Noncancer risk of >10.0 Hazard Index (chronic, from all local sources) Ambient PM <sub>2.5</sub> >0.8 µg/m <sup>3</sup> annual average (from all local sources) Zone of Influence: 1,000-foot radius from property line of source or receptor		
Accidental Release of Acutely Hazardous Air Pollutants	None	Storage or use of acutely hazardous material located near receptors or new receptors located near stored or used acutely hazardous materials considered significant	
Odors	None	Five confirmed complaints to BAAQMD per year averaged over 3 years	

Source: BAAQMD 2017a

Notes: lbs/day = pounds per day; tons/year = tons per year; ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter; ROG = reactive organic gases; NO<sub>x</sub> = oxides of nitrogen; PM<sub>10</sub> = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less; PM<sub>2.5</sub> = fine particulate matter with an aerodynamic resistance diameter of 2.5 micrometers or less; CO = carbon monoxide

## Environmental Setting

The project site is located within the boundaries of the San Francisco Bay Area Air Basin (SFBAAB) and is under the jurisdiction of the BAAQMD. The SFBAAB encompasses all of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, and Santa Clara Counties, and the southern portions of Solano and Sonoma Counties. Air pollutants are emitted by a variety of sources, including mobile sources (vehicles), off-road equipment, marine sources, area sources (hearths, consumer product use, architectural coatings, and landscape maintenance equipment), energy sources (natural gas), and stationary sources (generator or other stationary equipment).

Air quality is a function of the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, and consequently affect air quality. The climate of the SFBAAB is determined largely by a high-pressure system that is usually present over the eastern Pacific Ocean off the west coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing more storms to pass through the region. During summer and early fall, when few storms pass through the region, emissions generated within the Bay Area can combine with abundant sunshine under the restraining influences of topography and subsidence inversions to create conditions that are conducive to the formation of photochemical pollutants, such as O<sub>3</sub>, and secondary particulates, such as nitrates and sulfates. In the SFBAAB, temperature inversions can often occur during the summer and winter months. An inversion is a layer of warmer air over a layer of cooler air that traps and concentrates pollutants near the ground. As such, the highest air pollutant concentrations in the SFBAAB generally occur during inversions (BAAQMD 2017a).

**a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?***

**Less-than-Significant Impact.** An area is designated as “in attainment” when it is in compliance with the federal and/or state standards. These standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or public welfare with a margin of safety. The SFBAAB is designated non-attainment for the federal 8-hour O<sub>3</sub> and 24-hour PM<sub>2.5</sub> standards. The area is in attainment or unclassified for all other federal standards. The area is designated non-attainment for state standards for 1-hour and 8-hour O<sub>3</sub>, 24-hour PM<sub>10</sub>, annual PM<sub>10</sub>, and annual PM<sub>2.5</sub>.

On April 19, 2017, the BAAQMD adopted the *Spare the Air: Cool the Climate Final 2017 Clean Air Plan* (BAAQMD 2017b). The 2017 Clean Air Plan provides a regional strategy to protect public health and protect the climate. To protect public health, the 2017 Clean Air Plan includes all feasible measures to reduce emissions of O<sub>3</sub> precursors (ROG and NO<sub>x</sub>) and reduce O<sub>3</sub> transport to neighboring air basins. In addition, the 2017 Clean Air Plan builds upon the BAAQMD efforts to reduce fine particulate matter (PM) and TACs. To protect the climate, the plan defines a vision for transitioning the region to a post-carbon economy needed to achieve ambitious greenhouse gas (GHG) reduction targets for 2030 and 2050, and provides a regional climate protection strategy that will put the Bay Area on a pathway to achieve those GHG reduction targets.

The BAAQMD Guidelines identify a three-step methodology for determining a project’s consistency with the current Clean Air Plan. If the responses to these three questions can be concluded in the affirmative and those conclusions are supported by substantial evidence, then the BAAQMD considers the project to be consistent with air quality plans prepared for the Bay Area.

The first question to be assessed in this methodology is “does the project support the goals of the Air Quality Plan”? The BAAQMD-recommended measure for determining project support for these goals is consistency with BAAQMD thresholds of significance. If a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation measures, the project would be consistent with the goals of the 2017 Clean Air Plan. As indicated in the following discussion with regard to air quality impact questions b) and c), the project would result in less-than-significant construction and operational emissions and would not result in long-term adverse air quality impacts. Therefore, the project would be considered to support the primary goals of the 2017 Clean Air Plan and is consistent with the current Clean Air Plan.

The second question to be assessed in this consistency methodology is “does the project include applicable control measures from the Clean Air Plan?” The 2017 Clean Air Plan contains 85 control measures aimed at reducing air pollution in the Bay Area. Projects that incorporate all feasible air quality plan control measures are considered consistent with the Clean Air Plan. The project includes the refurbishment of the AMS Ferry Terminal, including replacement of the terminal bridge and foundation, gangway replacement, float demolition and replacement, and utility upgrades. No operational changes would occur with the project. The control strategies of the 2017 Clean Air Plan include measures in the categories of stationary sources, the transportation sector, the buildings sector, the energy sector, the agriculture sector, natural and working lands, the waste sector, the water sector, and super-GHG pollutant measures. Depending on the control measure, the tools for implementation include leveraging the BAAQMD rules and permitting authority, regional coordination and funding, working with local governments to facilitate best policies in building codes, outreach and education, and advocacy strategies. The project would comply with all applicable BAAQMD rules and would incorporate any applicable energy efficiency and green building measures as required by the City of Alameda and in compliance with state standards and/or local building codes in effect at the time of development. Therefore, the project would include applicable control measures from the 2017 Clean Air Plan.

The third question to be assessed in this consistency methodology is “does the project disrupt or hinder implementation of any control measures from the Clean Air Plan?” Examples of how a project may cause the disruption or delay of control measures include a project that precludes an extension of a transit line or bike path or proposes excessive parking beyond parking requirements. The project would not create any barriers or impediments to planned or future improvements to transit or bicycle facilities in the area, nor would it include excessive parking. Therefore, the project would not hinder implementation of 2017 Clean Air Plan control measures.

In summary, the responses to all three of the questions with regard to Clean Air Plan consistency are affirmative and the project would not conflict with or obstruct implementation of the 2017 Clean Air Plan. Impacts would be less than significant, and no mitigation is required.

**b) *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?***

*Less-than-Significant Impact with Mitigation Incorporated.* The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction of the project. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with the construction and operational activities from a

variety of land use projects, such as residential, recreational, commercial, and industrial facilities. CalEEMod input parameters, including the proposed construction schedule and equipment were based on information provided by the applicant, or default model assumptions if project specifics were unavailable. In addition, the Sacramento Metropolitan Air Quality Management District’s (SMAQMD) Harborcraft, Dredge, and Barge Emission Factor Calculator (2017) was used to estimate emissions associated with the support tugboat and small skiff usage during construction.<sup>1</sup>

### Construction

Demolition and subsequent construction would likely begin in Summer 2023 and take a total of 30 days to complete. Sources of emissions would include: off-road construction equipment exhaust (i.e., pile driver, a crane on the derrick barge, and small compressors and generators for handheld tools), on-road vehicles exhaust and entrained road dust (i.e., concrete/ material delivery trucks and worker vehicles), and marine vessels. Detailed assumptions associated with project construction are included in Appendix B.

Average daily emissions were computed by dividing the total construction emissions by the number of active construction days, which were then compared to the BAAQMD construction thresholds of significance. Table 3.3-2 shows average daily construction emissions of O<sub>3</sub> precursors (ROG and NO<sub>x</sub>), PM<sub>10</sub> exhaust, and PM<sub>2.5</sub> exhaust during project construction.<sup>2</sup>

**Table 3.3-2. Average Daily Construction Emissions**

Source	ROG	NO <sub>x</sub>	PM <sub>10</sub> Exhaust	PM <sub>2.5</sub> Exhaust
	Pounds per Day <sup>a</sup>			
<b>Unmitigated</b>				
Off-road Equipment and On-road Vehicles	1.84	15.97	0.75	0.73
Marine Vessels	3.16	39.41	1.78	1.58
<b>Total Daily Average</b>	<b>5.00</b>	<b>55.38</b>	<b>2.52</b>	<b>2.31</b>
<i>BAAQMD Construction Thresholds</i>	54	54	82	54
<b>Exceed Threshold?</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>No</b>
<b>Mitigated<sup>b</sup></b>				
Off-road Equipment and On-road Vehicles	1.46	11.30	0.54	0.54
Marine Vessels	3.16	39.41	1.78	1.58
<b>Total Daily Average</b>	<b>4.62</b>	<b>50.71</b>	<b>2.32</b>	<b>2.13</b>
<i>BAAQMD Construction Thresholds</i>	54	54	82	54
<b>Exceed Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

**Source:** Appendix B

**Note:** ROG = reactive organic gases; Nox = oxides of nitrogen; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter

<sup>a</sup> The values shown are average daily emissions based on total overall tons of construction emissions, converted to pounds, and divided by 30 active work days.

<sup>b</sup> The mitigated scenario accounts for implementation of Mitigation Measure 3.3-1.

<sup>1</sup> The BAAQMD does not have a harbor craft emissions calculator; therefore, the SMAQMD calculator was used.

<sup>2</sup> Fuel combustion during construction and operations would also result in the generation of sulfur dioxide (SO<sub>2</sub>) and CO. These values are included in Appendix B. However, since the SFBAAB is in attainment of these pollutants, the BAAQMD has not established a quantitative mass-significance threshold for comparison and are not included in the project-generated emissions tables in this document. Notably, the BAAQMD does have screening criteria for operational localized CO, which are discussed in more detail below.

As shown in Table 3.3-2, unmitigated construction of the project would potentially exceed the average daily BAAQMD significance threshold for NO<sub>x</sub>. However, implementation of Mitigation Measure 3.3-1, which requires Tier 4 Final engines for equipment greater than 200 horsepower, would reduce average daily NO<sub>x</sub> emissions to below the BAAQMD threshold. Further, although the BAAQMD does not have a quantitative significance threshold for fugitive dust, the BAAQMD's CEQA Guidelines recommend that projects determine the significance for fugitive dust through application of best management practices (BMPs). However, no grading for the project is anticipated. Based on the preceding considerations, criteria air pollutant emissions during construction would be less than significant after mitigation.

## Operations

The project would not result in a change in operations, and operations are anticipated to resume upon completion of project construction. Therefore, there would be no net increase in emissions.

## Health Effects of Criteria Air Pollutants

ROG and NO<sub>x</sub> are precursors to O<sub>3</sub>, for which the SFBAAB is designated as nonattainment with respect to the NAAQS and CAAQS. The health effects associated with O<sub>3</sub> are generally associated with reduced lung function. The contribution of ROG and NO<sub>x</sub> to regional ambient O<sub>3</sub> concentrations is the result of complex photochemistry. The increases in O<sub>3</sub> concentrations in the SFBAAB due to O<sub>3</sub> precursor emissions tend to be found downwind from the source location to allow time for the photochemical reactions to occur. However, the potential for exacerbating excessive O<sub>3</sub> concentrations would also depend on the time of year that the ROG emissions would occur because exceedances of the O<sub>3</sub> CAAQS/NAAQS tend to occur between April and October when solar radiation is highest. The holistic effect of a single project's emissions of O<sub>3</sub> precursors is speculative due to the lack of quantitative methods to assess this impact. Thus, a project's ROG and NO<sub>x</sub> emissions are evaluated in the context of the BAAQMD significance thresholds, which define the levels of emissions that can occur without causing or contributing to violations of the NAAQS or CAAQS. In turn, the NAAQS and CAAQS define the pollutant concentrations above which adverse health effects are expected to occur. Nonetheless, because ROG and NO<sub>x</sub> emissions associated with Project construction would be potentially significant before mitigation, the project could minimally contribute to regional O<sub>3</sub> concentrations and the associated health effects. However, this impact would be reduced to a less than significant level after implementation of 3.3-1. Regarding operations, the project would not result in a change to existing conditions or increased emissions.

Health effects that result from NO<sub>2</sub> include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, construction of the project is not anticipated to contribute to exceedances of the NAAQS or CAAQS for NO<sub>2</sub> because the SFBAAB is designated as in attainment of the NAAQS and CAAQS for NO<sub>2</sub>, and the existing NO<sub>2</sub> concentrations in the area are well below the NAAQS and CAAQS standards.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, thereby reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of

central nervous system functions. Regarding localized CO concentrations, according to the BAAQMD thresholds, a project would result in a less-than-significant impact if the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans.
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

The project would generate minimal traffic during short-term construction and would comply with the BAAQMD screening criteria. Accordingly, project-related traffic would not exceed CO standards and therefore, no further analysis was conducted for CO impacts. This CO emissions impact would be considered less than significant on a project-level and cumulative basis. Thus, the project's CO emissions would not contribute to the health effects associated with this pollutant.

As depicted in Table 3.3-2, construction of the project would not exceed thresholds for PM<sub>10</sub> or PM<sub>2.5</sub>, and thus, would not contribute to exceedances of the NAAQS and CAAQS for particulate matter or obstruct the SFBAAB from coming into attainment for these pollutants. Additionally, grading is not anticipated to be required for the project. Due to the minimal contribution of particulate matter during construction, the project is not anticipated to result in health effects associated with PM<sub>10</sub> or PM<sub>2.5</sub>.

### **Mitigation Measure 3.3-1: Construction Equipment Emission Reductions**

Prior to the commencement of construction activities for the project, the applicant shall require its construction contractor to demonstrate that all 200-horsepower or greater diesel-powered equipment is powered with CARB-certified Tier 4 Final engines.

An exemption from this requirement may be granted if (1) the applicant documents equipment with Tier 4 Final engines greater than 200-horsepower are not reasonably available, and (2) the required corresponding reductions in criteria air pollutant emissions can be achieved for the project from other combinations of construction equipment. Before an exemption may be granted, the Applicant's construction contractor shall: (1) demonstrate that at least two construction fleet owners/operators in Alameda County were contacted and that those owners/operators confirmed Tier 4 Final equipment could not be located within Alameda County during the desired construction schedule; and (2) the proposed replacement equipment has been evaluated using the California Emissions Estimator Model (CalEEMod) or other industry standard emission estimation method and documentation provided to the Lead Agency to confirm that necessary project-generated emissions reductions are achieved.

#### **c) *Would the project expose sensitive receptors to substantial pollutant concentrations?***

**Less-than-Significant Impact.** Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Children, pregnant women, older adults, and people with existing health problems are especially vulnerable to the effects of air pollution. Accordingly,



land uses where sensitive-receptor population groups are likely to be located at hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes (BAAQMD 2017a). The nearest sensitive receptors to the project are the single-family residences across Main Street (approximately 500 feet to the south).

TACs are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. Health effects from carcinogenic air toxics are usually described in terms of cancer risk. BAAQMD recommends an incremental cancer risk threshold of 10 in 1 million. “Incremental cancer risk” is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard California Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. BAAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic effects.<sup>3</sup> The TAC that would potentially be emitted during construction activities associated with the project would be diesel particulate matter.

Diesel particulate matter emissions would be emitted from heavy equipment operations, marine vessels, and heavy-duty trucks. Heavy-duty construction equipment is subject to a CARB Airborne Toxic Control Measure (ATCM) for diesel construction equipment to reduce diesel particulate emissions. CARB has also established an ATCM for auxiliary diesel engines and diesel-electric engines operated on ocean-going vessels within California waters. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period and duration of activities associated with the project. The duration of the proposed construction activities would only constitute a small percentage of the total 30-year exposure period. The active construction period for the project would be up to 30 days, after which construction-related TAC emissions would cease. In addition, implementation of Mitigation Measure- 3.3-1 would reduce diesel exhaust. Due to the short period of exposure and minimal particulate emissions generated, TACs emitted during construction would not be expected to result in concentrations causing significant health risks. Impacts would be less than significant, and no mitigation is required.

**d) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

**Less-than-Significant Impact.** The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints. BAAQMD has identified typical sources of odor in the CEQA Air Quality Guidelines, a few examples of which include manufacturing plants, rendering plants, coffee roasters, wastewater treatment plants, sanitary landfills, and solid waste transfer stations. The project would not include uses that have

---

<sup>3</sup> Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various non-carcinogens from the proposed project to published reference exposure levels that can cause adverse health effects.

been identified by BAAQMD as potential sources of objectionable odors. Impacts would be less than significant, and no mitigation is required.

### 3.4 Biological Resources

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

### Environmental Setting

A Biological Technical Report (BTR) (Appendix C) was prepared by Dudek in November 2022. The BTR describes the existing conditions related to biological resources within the project area, provides regulatory and environmental



setting for the project, and includes discussions of potential biological resource impacts that could result under project implementation. Mitigation measures are also provided where potentially significant impacts were identified. For a discussion of the applicable regulatory setting for the project, refer to Section 2, Regulatory Setting.

The data regarding biological resources present within the biological survey area (BSA) of the BTR was obtained through a review of pertinent literature, field reconnaissance, and habitat assessment. On July 8, 2022, a reconnaissance-level field survey of the BSA was conducted to document biological resources and vegetation communities (Dudek 2022).

## Vegetation

Landside vegetation within the project area includes ruderal and non-native grassland and urban/developed land. Marine resources include open water, aquatic, and subtidal habitat in the vicinity of the terminal dock and in the Oakland Inner Harbor, which is part of the Central Bay, and Oakland-Alameda Estuary. Aquatic vegetation in the project area could include algae species or common subtidal plants including pondweed (*Potamogeton* spp.) and widgeon grass (*Ruppia maritima*). The greater San Francisco Bay and the Oakland-Alameda Estuary supports a large variety of invertebrates, crustaceans, mollusks, pelagic species, and a wide variety of fishes.

## Plants and Wildlife

A total of 7 native or naturalized plants species and 8 wildlife species were recorded within the project area and vicinity during the biological survey. Ruderal and nonnative grassland habitat species included fennel, foxtail brome, rat-tail six-weeks grass, wild oat, and black mustard (*Brass egraegra*). Wildlife species detected on or in the immediate vicinity of the project included California ground squirrel (*Otospermophilus beecheyi*), Canada goose (*Branta canadensis*), common raven (*Corvus corax*), European starling (*Sturnus vulgaris*), California gull (*Larus californicus*), rock pigeon (*Columba livia*), common tern (*Sterna hirundo*), and black oystercatcher (*Haematopus bachmani*). Appendix A and Appendix B of the BTR (Appendix C) provide tables of all special-status species whose geographic ranges fall within the general project vicinity.

### Special Status Plants Species

Based on the results of the literature review and database searches, 105 special-status plant species were identified as potentially occurring within the region of the BSA. None of these species were determined to have the potential to occur within the BSA based on the soils, vegetation communities (habitat) present, elevation range, and previous known locations based on the CNDDDB, IpaC, and CNPS Inventory.

### Special Status Wildlife Species

Based on the results of the literature review and database searches, 86 special-status wildlife species were reported in the CNDDDB and USFWS databases as occurring in the vicinity of the BSA. Of these, the following were determined to have a moderate or high potential to occur within the BSA based on habitat present and previous known locations in the CNDDDB and IpaC records: California Central Valley steelhead DPS, Central Coast Steelhead DPS, southern DPS of North American green sturgeon, Sacramento River winter-run ESU (endangered), Central Valley spring-run ESU (threatened), Central Valley spring-run ESU (San Joaquin River experimental population, non-essential), Central Valley fall-run/late fall-run (species of concern), longfin smelt (*Spirinchus thaleichthys*), and marine mammals.

## Critical Habitat and Essential Fish Habitat

“Critical habitat” is defined in Section 3(5)(A) of the federal Endangered Species Act, and designated by USFWS and NMFS, as habitat (lands or waters) that contain physical or biological features considered essential to the species’ conservation within the species’ range, as well as habitat determined to be essential to the species conservation outside of the current range of that species. The open water habitat in the BSA includes areas designated as critical habitat for green sturgeon and is adjacent to portions of the San Francisco Bay estuary designated as critical habitat for Sacramento River winter-run Chinook Salmon ESU.

Essential Fish Habitat (EFH) includes “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” as defined by congress in the Magnuson-Stevens Act, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-297). The open water habitat within the BSA is designated EFH for fish managed in the following federal fisheries management plans (FMPs):

- The Pacific Groundfish FMP
- The Coastal Pelagic FMP
- The Pacific Coast Salmon FMP

## Potential Jurisdictional Waters

The project area includes portions of the San Francisco Bay estuary and Oakland Inner Harbor, which are considered navigable waters of the United States. The open water portion of the project area is therefore a “jurisdictional” water regulated by the Army Corps of Engineers (Corps) under Section 10 of the Rivers and Harbors Act up to mean high water and Section 404 of the Clean Water Act (CWA) up to the high tide line. These waters are also regulated by the San Francisco Bay Regional Water Quality Control Board (RWQCB) as Waters of the State and by the San Francisco Bay Conservation and Development Commission (BCDC), which has jurisdiction over all areas of San Francisco Bay that are subject to tidal action, as well as a shoreline band that extends inland 100 feet from the high tide line (see Figure 2). No wetlands are present within the project area.

## Wildlife Corridors and Habitat Linkages

The San Francisco Bay estuary and the Oakland Inner Harbor serves as a local movement corridor that connects habitat for certain birds, marine mammals, and fish species. Since the proposed project would not significantly alter habitat conditions in the Oakland Inner Harbor, it is not expected to contribute to the impediment of local or seasonal movement of wildlife through the surrounding habitat.

- a) ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

**Less-than-Significant Impact with Mitigation Incorporated.** The following special status fish and wildlife species could occur within the project site during construction: California Central Valley steelhead Distinct Population Segment (DPS), Central Coast Steelhead DPS, southern DPS of North American green sturgeon, Sacramento River winter-run chinook salmon Evolutionarily Significant Unit (ESU), Central Valley spring-run chinook salmon ESU, Central Valley fall-run chinook salmon (species of concern), longfin smelt, and marine mammals.

The demolition of the existing bridge/walkway and bridge foundation, and replacement of the existing terminal float will require in-water work to remove existing piles and install new steel pipe piles. The special-status fish and marine mammals that could occur in the BSA could be adversely impacted by these project activities through impacts to water quality and release of sediments into the water and underwater noise impacts. Because species regulated by the NMFS, USFWS, and CDFW could occur and be potentially impacted by project construction, it is anticipated that the appropriate project permits will be obtained prior to project implementation and may include a Biological Opinion from NMFS and USFWS, an Incidental Take permit (ITP) from CDFW, and an Incidental Harassment Authorization (IHA) from NMFS.

### Impacts to Water Quality

The demolition of the existing bridge/walkway and bridge foundation, and replacement of the existing terminal float will require in-water work to remove existing piles and install new steel pipe piles which has the potential to result in short-term, temporary disturbance of benthic sediments. Existing piles planned for removal will be pulled, or if removal is not feasible, piles will be cut two (2) feet below the mudline. Suspended sediments could result in decreased water quality due to increased turbidity, the release of harmful chemicals into the water column, and may result in harmful effects to fish and wildlife in the vicinity. While removal of piles could result in the release of sediments, it is expected that the sediment release and increased turbidity would be of relatively short duration and generally confined within a few hundred feet of the activity, and that background levels would be restored within hours.

### Underwater Noise Impacts

No protected biological resources are located landside, and in light of existing industrial uses in the vicinity and distance of sensitive receptors to the project site, impacts related to excessive groundborne vibration or groundborne noise levels landside are considered less than significant

Installation of steel pipe piles can produce intense underwater noise that may lead to physical damage to swim bladders or other soft tissues, or cause alterations to swimming, sleeping, or foraging behaviors in fish and marine mammals. The installation of the new pipe piles for the float and bridge support are expected to use a vibratory hammer, with an impact hammer used only if needed. The NMFS has developed injury criteria for fish and for marine mammals; these injury criteria are typically reported as peak levels (peak), root-mean-square pressure (RMS), and sound exposure levels (SEL). While injury criteria have been established, lower sound levels that result in altered behavior would also be considered harassment to any ESA listed fish species.

To evaluate the potential project noise impacts related to pile installation, an acoustic assessment was conducted by Illingworth and Rodkin in 2022 (Appendix E). The analysis indicated that impact pile driving of the largest piles (48") could result in maximum underwater noise impacts exceeding the marine mammal thresholds extending out to about 997 meters for the Level A Injury zone for Pinnipeds while extending out to about 4,200 meters for the Level B Harassment Zones. Impact pile driving of the largest (48") piles could cause acoustic impacts at distances extending out to 4,200 m and 1,010 m for the root-mean-square (RMS) (150 decibel [dB] re 1 micropascal [ $\mu$ Pa]) and Cumulative sound exposure level (SEL) (187 dB re  $1\mu$ Pa<sup>2</sup>-sec) respectively for the adopted fish thresholds. While all impact hammer use would be conducted between June 1 and November 30, when the likelihood of sensitive fish species being present in the work area is minimal, sensitive fish species could be present in the vicinity of the project area and could be

impacted by noise from pile driving. Therefore, project construction activities would result in a potentially significant impact to special-status fish and marine wildlife.

### **Mitigation Measure 3.4-1: Minimize and Avoid Underwater Noise Impacts**

WETA and their construction contractor shall implement the following noise minimization and avoidance measures during project construction activities.

- All piling installation shall be conducted between June 1 and November 30, when the likelihood of sensitive fish species being present in the work area is minimal.
- Vibratory pile driving shall be conducted following the United States. Army Corps of Engineers. 2018. "U.S. Army Corps of Engineers Proposed Additional Procedures and Criteria for Permitting Projects under a Programmatic Determination of Not Likely to Adversely Affect Select Listed Species in California (the 2018 NLAA Program)". p 1-37. San Francisco, CA.
- To the extent feasible, all pilings shall be installed and removed with vibratory pile driver hammer only.
- An impact pile driver may only be used where necessary to complete installation of larger steel pilings in accordance with seismic safety or other engineering criteria.
  - If an impact pile driver is used it will be cushioned using a 12-inch-thick wood cushion block.
  - A Hydro Acoustic Monitoring Plan shall be prepared to be implemented in the event that an impact hammer is used. The sound monitoring results will be made available to CDFW and NMFS.
  - This Plan will provide detail on the sound attenuation system, the methods used to monitor and verify sound levels during impact pile driving activities,
  - The Plan shall include the use of a bubble curtain during any impact pile driving of piles in the water. The bubble curtain will be operated in a manner consistent with the following performance standards:
    - The bubble curtain will distribute air bubbles around 100% of the piling perimeter for the full depth of the water column.
    - The lowest bubble ring will be in contact with the mudline for the full circumference of the ring, and the weights attached to the bottom ring shall ensure 100% mudline contact. No parts of the ring or other objects shall prevent full mudline contact.
    - Air flow to the bubblers must be balanced around the circumference of the pile.
- A "soft start" technique shall be employed in all pile driving to give marine mammals an opportunity to vacate the area.
- Soft Start: When initiating pile driving, or when there has been downtime of 30 minutes or more without pile driving, the contractor will initiate the driving with ramp-up procedures described below.
- For vibratory hammers, the contractor will initiate the driving for 15 seconds at reduced energy, followed by a 30-second waiting period. This procedure will be repeated two additional times before continuous driving is started.
- For impact driving, an initial set of three strikes would be made by the hammer at 40% energy, followed by a 30-second waiting period, then two subsequent three-strike sets at 40% energy, with 30-second waiting periods, before initiating continuous driving.

- A biological monitor will be present during all pile driving to observe the work area before, during, and after pile driving. The monitor will be present as specified by NMFS during the impact pile-driving phases of construction.
- A safety zone, based on the results of the noise analysis (Appendix C) will be established based on the type of pile driving required for the protection of marine mammals. Pile driving will be halted if a marine mammal is observed within the safety zone and will not re-start until 15 minutes after the animal has left the safety zone.
- All necessary permits including a BO from USFWS and NMFS, an IHA from NMFS, and an ITP will be obtained and adhered to during construction for in-water work that requires impact pile driving and is not covered under one of the existing programmatic consultations for federally listed species.

### Mitigation Measure 3.4-2: Compensatory Mitigation for Longfin Smelt

Prior to construction, WETA shall obtain an ITP from the CDFW in accordance with California Fish & Game Code § 2081 (b), which states that, "the impacts of the authorized take shall be minimized and fully mitigated". In addition to the noise impact minimization measures described above, WETA shall provide compensatory mitigation for potential noise impacts to the longfin smelt by purchasing mitigation credits at a CDFW-approved conservation bank or contribute funds to a CDFW-approved mitigation project. Specific details for the compensatory mitigation including the number of credits, schedule and payment terms shall be outlined in the conditions of the ITP.

With implementation of Mitigation Measures 3.4-1 and 3.4-2 which outline methods for reducing potentially harmful noise impacts during installation of piles and provision of compensatory mitigation, potentially significant impacts to special status fish and marine wildlife would be less than significant. No further mitigation would be necessary. Water quality impacts including turbidity and sedimentation from pile removal and demolition of existing structures are addressed under criterion (c), below.

- b) *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Less-than-Significant Impact with Mitigation Incorporated. No riparian habitat, or eelgrass and native oyster beds occur within the BSA. The BSA does include Critical Habitat for green sturgeon, and essential fish habitat (EFH) as defined under the Pacific Groundfish, Coastal pelagics, and Pacific Coast Salmon Fisheries Management Plans. Pile removal and replacement activities during project construction could result in water quality and noise impacts, as described under Impact BIO-1, and would temporarily limit the suitability of the open water habitat present in the BSA. No long-term impacts to this habitat (including habitat created by the presents of pilings- submerged vegetation or aquatic organisms can attach to pilings) is expected as a result of the project.

Another potential concern resulting from in-water work is the spread of invasive marine species. Project activities, including disturbance and temperature changes as a result of construction activities, could result in the spread of invasive marine species which could limit the future suitability of both EFH and green sturgeon critical habitat. Any adverse effect to critical habitat or other sensitive natural communities, including EFH and green sturgeon, would result in a potentially significant impact. Potentially significant impacts to special-status fish and marine wildlife habitat from the spread of invasive species would be

mitigated to less than significant through implementation of Mitigation Measure 3.4-2 which outlines methods for reducing the potential introduction and spread of invasive marine species.

### **Mitigation Measure 3.4-3: Avoid Any Spread or Introduction of Invasive Marine Species**

WETA and their construction contractor will ensure that standard Best Management Practices (BMPs) to avoid introduction or spread of marine invasive species are followed during construction and in-water work. Specific BMPs will be provided on the contractor's design drawings and will include but not be limited to the following:

- Environmental training of construction personnel involved in in-water work.
- Cleaning and sanitizing procedures for equipment and machinery used for in-water work.
- Procedures for the safe removal and disposal of any invasive taxa observed.

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

Less-than-Significant Impact with Mitigation Incorporated. No federally or state-defined wetlands occur within the BSA and thus no impacts to wetlands would occur. However, implementation of the proposed project would have minor temporary impacts to non-wetland waters under the jurisdiction of the USACE, RWQCB, and BCDC. The San Francisco Bay and Oakland Inner Harbor is a navigable water of the United States and is regulated by the Corps under Section 10 of the Rivers and Harbors Act up to mean high water and Section 404 of the CWA up to the high tide line. These waters are also regulated by the San Francisco Bay RWQCB as Waters of the State and by the BCDC. As described in Section 2, Project Description, a net total of 78 sf of additional pilings (total piling installed minus pilings removed) would be installed as part of the terminal rehabilitation. The 78 sf of pilings to be introduced would consist of piling and fender components and fill material. As discussed in criterion (a), above, temporary project impacts associated with installation of new pilings could decrease water quality and increase turbidity within the immediate project area. Any adverse effect on jurisdictional wetlands and/or water would result in a potentially significant impact.

### **Mitigation Measure 3.4-4: Implement BMPs and Follow Approved Agency Requirements for In-Water Construction**

Best management practices (BMPs) will be employed during project construction activities to protect special status species and their aquatic habitats. The contractor undertaking construction work will exercise every reasonable precaution to protect listed species and ESA-protected species and their habitat(s) from construction by-products and pollutants such as construction chemicals, fresh cement or other deleterious materials. Construction may be conducted from both land and water. Care will be used by equipment operators to control debris so that it does not enter the Bay. WETA's contractors shall prepare the plans covering the BMPs as follows: Stormwater Pollution Prevention Plan, Erosion and Sediment Control Plan, Oil Spill Prevention and Control Plan to specify restrictions and procedures for fuel storage



location, fueling activities, and equipment maintenance locating fueling stations away from potentially jurisdictional features, and Construction Debris Management Plan.

The measures identified in these four plans listed above will be based on Best Available Technology and will include but not be limited to the following:

- All debris will be off hauled, processed, and properly disposed of. The piles will be cut at the mudline and pulled out of the water. Timber piles that have been treated with creosote, or that contain other potentially hazardous materials, will be handled properly and disposed of at a facility permitted to handle hazardous waste. Any debris found on the seafloor in the ferry terminal's vicinity will be removed and disposed of on land.
  - Measures to ensure that fresh cement or concrete will not be allowed to enter the Bay. Construction waste will be collected and transported to an authorized upland disposal area, as appropriate, and per federal, state and local laws and regulations.
  - All hazardous material will be stored upland in storage trailers and/or shipping containers designed to provide adequate containment. Short-term laydown of hazardous materials for immediate use will be permitted with the same anti-spill precautions:
  - All construction material, wastes, debris, sediment, rubbish, trash, fencing, etc., will be removed from the site once the proposed project is completed and transported to an authorized disposal area, as appropriate, in compliance with applicable federal, state and local laws and regulations;
  - Construction material will need to be covered every night and during any rainfall event (if there is one);
  - Construction crews will reduce the amount of disturbance within the Project site to the minimum necessary to accomplish the project;
  - Measures to prevent debris from entering the Bay;
  - Vessels and equipment that rely on internal combustion engines for power and/or propulsion will be kept in good working condition and compliant with California emission regulations;
  - No in-water fueling at the Project site will be permitted. Vehicles and equipment that are used during the course of construction will be fueled and serviced offsite. Fueling locations will be inspected after fueling to document that no spills have occurred. Any spills will be cleaned up immediately.

With implementation of Mitigation Measure 3.4-4, which would ensure compliance with agency requirements and application of BMPs during construction activities to prevent adverse impacts to receiving waters, the project's potential to significantly impact non-wetland waters would be less than significant. No further mitigation would be required.

**d) *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

Less-than-Significant Impact. During construction activities, temporary disturbance to local species may occur, but would not substantially degrade the quality or use of the marine communities in the vicinity. The Oakland Inner Harbor does not provide a migratory corridor for sensitive fish species; as

described in Section 5.6 of Appendix C (Biological Technical Report), fish migrating into and out of spawning habitat either in the Sacramento or San Joaquin River systems, or suitable perennial streams located in other parts of the Bay, are not likely to be found moving through the Oakland Inner Harbor. Following temporary construction disturbances, the function and values of the Oakland Inner Harbor are expected to remain the same. Thus, no significant direct permanent impacts would occur on wildlife movement or use of native wildlife nursery sites associated with project activities. Construction activities would not likely result in permanent impacts to wildlife movement because no new structures that would impede wildlife movement are proposed.

Furthermore, indirect impacts to localized wildlife movement could occur during construction activities due to construction-related noise, including during pile driving. However, construction-generated noise would be temporary and would not be expected to significantly, nor permanently, disrupt wildlife movement during and following construction activities. Impacts would be less than significant, and no mitigation is required.

**e) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

**Less-than-Significant Impact.** Potentially significant impacts resulting from implementation of the proposed project were analyzed for compliance with the County's General Plan Open Space and Conservation Element. General Plan Policy CC-28 involves maintenance and improvement measures for the Alameda Nature Reserve, which is located approximately one mile west of the project site and does not apply to the proposed project. General Plan Policy CC-34 involves preservation of existing natural areas/elements and protection of native plant and wildlife species through actions such as implementing BMPs during construction, conducting biological surveys, consultation with applicable agencies, and implementing mitigation measures. The project would involve refurbishment of the existing AMS Ferry terminal which would include temporary construction activities within the Oakland Inner Harbor. During construction, the project would comply with applicable General Plan policies, including Policy CC-34, and would also implement mitigation measures, described above, to reduce any potential biological resource impacts to a less-than-significant level. Further, the project does not propose any changes nor modifications to existing policies or ordinances that would conflict with measures intended to protect biological resources. Because the project would comply with existing General Plan 2040 policies and would not conflict with any policies or ordinances protecting biological resources. Impacts would be less than significant and no mitigation is required.

**f) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

**No Impact.** There are no habitat conservation plans (HCPs) or natural community conservation plans (NCCPs) covering the project site. As described in criterion (e), above, the project would not conflict with any local policies or ordinances. No HCPs or NCCPs cover the project site. There would be no impacts, and no mitigation is required.



### 3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>V. CULTURAL RESOURCES – Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Regulatory Framework

##### National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation’s master inventory of known historic properties. It is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

Listing in the NRHP does not entail specific protection or assistance for a property but it does guarantee consideration in planning for federal or federally-assisted projects, eligibility for federal tax benefits, and qualification for federal historic preservation assistance. Additionally, project effects on properties listed in the NRHP must be evaluated under CEQA.

##### California Environmental Quality Act

The CEQA Guidelines define a historical resource as: (1) a resource in the California Register; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency’s determination is supported by substantial evidence in light of the whole record.

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important archeological resources, either historical resources or unique archeological resources. If a lead agency determines that an archeological site is a historical resource, the provisions of Public Resources Code Section 21084.1 would apply and CEQA Guidelines Sections 15064.5(c) and 15126.4 and the limits in Public Resources Code Section 21083.2 would not apply. If an archaeological site does not meet the CEQA Guidelines criteria for a

historical resource, then the site may meet the threshold of PRC Section 21083.2 regarding unique archaeological resources. A unique archaeological resource is “an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria.

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person” (PRC Section 21083.2 [g]).

The CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064[c][4]).

### California Register of Historical Resources

The California Register is “an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for eligibility are based on National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for or listed in the National Register.

To be eligible for the California Register, an historical resource must be significant at the local, state, and/or federal level under one or more of the following criteria.

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history (PRC Section 5024.1[c]).

For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

## Environmental Setting

### Prehistoric Setting

Prior to the arrival of Europeans in the late 18th Century, much of the San Francisco Bay area was occupied for thousands of years by a collection of Native American tribal groups referred to as Costanoans. Subsequently, Costanoans were referred to by ethnographers as Ohlone, which is the term preferred by some of the affiliated tribal

groups. Also referred to as Bay Miwok, the Ohlone occupied an area stretching from below Monterey, northward through the Coast Ranges to the Sacramento River Delta, and eastward to the San Joaquin River.

The languages spoken in the Ohlone territories included Chochenyo, Matsun, Rumsen, and Tamyen, among others. The present-day City of Alameda lies within the prehistoric territory of the Chochenyo. The Chochenyo occupied a large area extending from present day Richmond to Mission San Jose, including the entire Alameda Creek watershed, and inland to the Livermore and Pleasanton Valleys.

Archaeologists have divided human history of the San Francisco Bay region into four broad periods: the Paleoindian Period (11,500 to 8000 before current era [B.C.E]), the Early Period (8000 to 500 B.C.E), the Middle Period (500 B.C.E to anno domini [A.D.] 1050), and the Late Period (A.D. 1050 to 1550).

Evidence of human habitation during Paleoindian Period, which was characterized by big-game hunters occupying broad geographic areas, has not yet been discovered in the San Francisco Bay Area. During the Early Period (Lower Archaic; 8000 to 3500 B.C.E), geographic mobility continued but the period is also marked by the introduction of milling slabs and hand stones for processing acorns and large wide-stemmed and leaf-shaped projectile points for use in hunting weapons. The first cut shell beads and the mortar and pestle are documented in burials during the Early Period (3500 to 500 B.C.E), indicating the beginning of a shift to sedentism.

During the Middle Period, which includes the Lower Middle Period (500 B.C.E to A.D. 430), and Upper Middle Period (A.D. 430 to 1050), geographic mobility may have continued, although groups began to establish longer-term base camps in localities from which a more diverse range of resources could be exploited. The first rich midden sites are recorded from this period. The addition of milling tools, obsidian and chert concave-base projectile points, and the occurrence of sites in a wider range of environments suggest that the economic base was increasingly diverse.

By the Upper Middle Period, highly mobile hunter-gatherers were increasingly settling down into numerous small villages. Around A.D. 430, a dramatic cultural disruption occurred evidenced by the sudden collapse of the Olivella saucer bead trade network. During the Initial Late Period (A.D. 1050 to 1550), social complexity developed toward lifeways of large, central villages with resident political leaders and specialized activity sites. Artifacts associated with the period include the bow and arrow, small corner-notched projectile points, and a diversity of beads and ornaments (City of Alameda 2021a).

## Historic Setting

Ferry service was established early in Alameda. By 1864 ferry service to San Francisco and Oakland was operating from the west end of the City. The service was operated by the San Francisco and Alameda Railroad, and was used for a brief time by the Central Pacific Railroad as the terminus of the Transcontinental Railroad. As a result of these proximate rail and water connections, an industrial center grew in western Alameda.

In 1978 the City of Alameda conducted a survey of Alameda's architectural and historical heritage, compiling the results into an Historical Building Study List of historic resources. The Historical Building Study List is maintained by the Historical Advisory Board and includes approximately 4,000 properties in Alameda. The List serves as preliminary evaluation and constitutes a tool in the ongoing process of identification, evaluation, and preservation of Alameda's architectural and historical resources. There are 29 designated Historical Monuments in Alameda as well as two historic districts (City of Alameda 2021a).

## Known Resources

A cultural resources literature search was conducted in August 2022 by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at California State University, Sonoma. The records search was conducted to determine if prehistoric or historic cultural resources had been previously recorded within the project site, the extent to which the project site had been previously surveyed, and the number and type of cultural resources within a 0.5-mile radius of the project area.

The NWIC records search indicated that two prior cultural resource studies have been completed within the project area, and an additional six have been completed outside the project area but within the 0.5-mile record search radius. The records search revealed that one cultural resource has been previously recorded within the project area, and 51 additional resources have been previously identified within the 0.5-mile record search radius.

The previously recorded cultural resource located in the project area is the Todd Shipyard historic district, also known as the United Engineering Company Shipyard (P-01-003218). The shipyard was evaluated as a district containing 27 buildings and structures in May 1988 and assigned an Office of Historic Preservation (OHP) California Historical Resource (CHR) status code of 4D: *May become eligible for NR* [National Register of Historic Places] as a *contributing property*. Following the conversion of new CHR status codes in 2003, the resource as a whole is presently listed in the Built Environment Resources Directory (BERD) with a CHR status code of 7N: *Needs to be reevaluated - formerly coded as may become NR eligible with specific conditions*. There is one building within the district, the Shop Building (61T), located approximately 500 feet southeast of the project site, that was individually evaluated and is listed as individually eligible for the NR and the California Register of Historic Resource under CHR status code 3D: *appears eligible for NR as a contributor to a NR eligible multi-component resource through survey evaluation*. The Bay Ship & Yacht Company building located adjacent to the proposed project site, is within the delineated boundary of the Todd Shipyard historic district, however, it is modern construction, estimated to be built in 2005.

Because P-01-003218 was previously evaluated as an eligible district and requires further evaluation for current listing, the analysis below considers the Todd Shipyard a resource under CEQA Guidelines Section 15064.5.

**a) *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?***

*Less-than-Significant Impact.* As described above, P-01-003218 was previously evaluated as an eligible district and requires further evaluation for NRHP and CRHR listing. Implementation of the project would include refurbishment of the existing AMS Ferry Terminal and would be limited to the project site, as indicated in Figure 2-2. Construction and operation activities would not extend beyond the identified project boundaries and would not result in any changes and/or alterations to any of the individual buildings within the Todd Shipyard historic district site. As such, project implementation would not result in any changes in the significance of a historical resource. Impacts would be less than significant and no mitigation is required.

**b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?***

*Less-than-Significant Impact with Mitigation Incorporated.* The results of the NWIC records search, conducted in August 2022, did not yield any information regarding known archaeological sites within the

project site or within 0.5 miles of the project site. Project construction activities would involve ground disturbance associated with new and replacement terminal structures, including the terminal bridge, bridge foundation, gangway, and terminal float. Though no known resources have been identified within the project site and surrounding area, the possibility remains that archaeological materials could be encountered during construction-related ground disturbing activities. This impact would be potentially significant.

### **Mitigation Measure 3.5-1: Protection of Known and Unknown Archaeological Resources**

The following shall be implemented by WETA and the construction contractor during any ground-disturbing activities associated with project construction:

- In the event that unknown cultural deposits (e.g., prehistoric stone tools, milling stones, historic glass bottles, foundations) are encountered during project construction, all ground-disturbing activity within 30 feet of the resources shall be halted and a qualified professional archaeologist (36 Code of Federal Regulations [CFR] 61) and appropriate Native American tribal representative shall be notified immediately and retained to assess the significance of the find. Construction activities could continue in other areas of the project site.
- If the find is determined to be significant by the qualified archaeologist or Native American tribe (i.e., because it is determined to constitute either a historical resource or a unique archaeological resource), the archaeologist shall develop appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.
- If the qualified archaeologist determines the archaeological material to be Native American in nature, WETA shall contact the culturally affiliated Native American tribe for their input on the preferred treatment of the find.

Therefore, with implementation of Mitigation Measure 3.5-1, the project's potential to impact archaeological resources would be addressed by cessation of work, implementation of proper data recovery, and/or preservation procedures upon discovery of previously unknown resources, would be less than significant. No further mitigation would be required.

**c) *Would the project disturb any human remains, including those interred outside of formal cemeteries?***

**Less-than-Significant Impact.** Based on documentary research, no evidence suggests that any prehistoric or historic-era marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, the location of grave sites and Native American remains can occur outside of identified cemeteries or burial sites. Therefore, there is a possibility that unmarked, previously unknown Native American or other graves could be present within the project site and could be uncovered by project-related construction activities.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Sections 7050.5 and PRC Section 5097.

These statutes require that, if human remains are discovered during any construction activities, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the Alameda County coroner and Native American Heritage Commission (NAHC) shall be notified immediately, in accordance with to PRC Section 5097.98 and Section 7050.5 of California’s Health and Safety Code. If the remains are determined by NAHC to be Native American, the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains.

Following the coroner’s findings, the archaeologist, the NAHC-designated Most Likely Descendant, and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Compliance with California Health and Safety Code Sections 7050.5 and PRC Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Impacts would be less than significant and no mitigation is required.

### 3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VI. Energy – Would the project:</b>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Regulatory Framework

##### Federal

##### Federal Energy Policy and Conservation Act and CAFE Standards

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards, known as the Corporate Average Fuel Economy (CAFE) standards, for on-road motor vehicles in the United States. Pursuant to the act, the National Highway Traffic Safety Administration (NHTSA) is responsible for establishing additional vehicle standards. In 2012, new Corporate Average Fuel Economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer’s average fuel economy for the fleet of vehicles available for sale in the United States.



## Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. The act includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The act requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in the Act. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the Act to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

## Federal Energy Policy and Conservation Act

In 1975, Congress enacted the Federal Energy Policy and Conservation Act, which established the first fuel economy standards for on-road motor vehicles in the United States. Pursuant to the act, the NHTSA is responsible for establishing additional vehicle standards. In 2012, new fuel economy standards for passenger cars and light trucks were approved for model years 2017 through 2021 (77 FR 62624–63200). Fuel economy is determined based on each manufacturer's average fuel economy for the fleet of vehicles available for sale in the United States.

## Energy Independence and Security Act of 2007

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. In addition to setting increased Corporate Average Fuel Economy standards for motor vehicles, the EISA includes the following other provisions related to energy efficiency:

- Renewable Fuel Standard (RFS) (Section 202)
- Appliance and Lighting Efficiency Standards (Sections 301–325)
- Building Energy Efficiency (Sections 411–441)

This federal legislation requires ever-increasing levels of renewable fuels (RFS) to replace petroleum. The U.S. Environmental Protection Agency (EPA) is responsible for developing and implementing regulations to ensure that transportation fuel sold in the United States contains a minimum volume of renewable fuel. The RFS program regulations were developed in collaboration with refiners, renewable fuel producers, and many other stakeholders.

The RFS program was created under the Energy Policy Act of 2005 and established the first renewable fuel volume mandate in the United States. As required under the act, the original RFS program (RFS1) required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. Under the EISA, the RFS program was expanded in several key ways that lay the foundation for achieving significant reductions in GHG emissions from the use of renewable fuels, reducing imported petroleum, and encouraging the development and expansion of the renewable fuels sector in the United States. The updated program is referred to as RFS2 and includes the following:

- EISA expanded the RFS program to include diesel, in addition to gasoline.
- EISA increased the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.

- EISA established new categories of renewable fuel and set separate volume requirements for each one.
- EISA required the U.S. Environmental Protection Agency to apply lifecycle GHG performance threshold standards to ensure that each category of renewable fuel emits fewer GHGs than the petroleum fuel it replaces.

Additional provisions of the EISA address energy savings in government and public institutions, research for alternative energy, additional research in carbon capture, international energy programs, and the creation of “green” jobs.

## State

### Warren-Alquist Act

The California legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the California Energy Commission (CEC). The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- It directed the CEC to formulate and adopt the nation’s first energy conservation standards for buildings constructed and appliances sold in California.
- The act removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- The CEC was directed to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

### Senate Bills 1078 (2002), 107 (2006), X1-2 (2011), 350 (2015) and 100 (2018)

Senate Bill (SB) 1078 established the California Renewables Portfolio Standard (RPS) Program and required that a retail seller of electricity purchase a specified minimum percentage of electricity generated by eligible renewable energy resources as defined in any given year, culminating in a 20% standard by December 31, 2017. These retail sellers include electrical corporations, community choice aggregators, and electric service providers. The bill relatedly required the CEC to certify eligible renewable energy resources, design and implement an accounting system to verify compliance with the RPS by retail sellers, and allocate and award supplemental energy payments to cover above-market costs of renewable energy.

SB 107 (2006) accelerated the RPS established by SB 1078 by requiring that 20% of electricity retail sales be served by renewable energy resources by 2010 (not 2017). Additionally, SB X1-2 (2011) requires all California utilities to generate 33% of their electricity from eligible renewable energy resources by 2020. Specifically, SB X1-2 sets a three-stage compliance period: by December 31, 2013, 20% had to come from renewables; by December 31, 2016, 25% had to come from renewables; and by December 31, 2020, 33% will come from renewables.

SB 350 (2015) expanded the RPS because it requires retail seller and publicly owned utilities to procure 50% of their electricity from eligible renewable energy resources by 2030, with interim goals of 40% by 2024 and 45% by 2027.

SB 100 (2018) accelerated and expanded the standards set forth in SB 350 by establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030 be secured from qualifying renewable energy sources. SB 100 also states that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of the



retail sales of electricity to California. This bill requires that the achievement of 100 percent zero-carbon electricity resources does not increase the carbon emissions elsewhere in the western grid and that the achievement not be achieved through resource shuffling.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the RPS requirements. Therefore, any project's reliance on non-renewable energy sources would also be reduced.

#### Assembly Bill 1007

AB 1007 (2005) required the CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan). The CEC prepared the plan in partnership with the California Air Resources Board (CARB) and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

#### California Building Standards

The California Building Standards Code was established in 1978 and serves to enhance and regulate California's building standards (California Code of Regulations, Title 24). Part 6 establishes energy efficiency standards for residential and non-residential buildings constructed in California to reduce energy demand and consumption. Part 6 is updated periodically (every 3 years) to incorporate and consider new energy efficiency technologies and methodologies. The 2022 standards will improve upon the 2019 standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The CEC adopted the 2022 Title 24 Energy Code in August 2021 and the California Building Standards Commission approved incorporating the updated code into the California Building Standards Code (CALGreen) in December 2021. The 2022 Energy Code will go into effect on January 1, 2023.

#### State Vehicle Standards

In response to the transportation sector accounting for more than half of California's carbon dioxide (CO<sub>2</sub>) emissions, AB 1493 was enacted in 2002. AB 1493 required CARB to set GHG emissions standards for passenger vehicles, light-duty trucks, and other vehicles determined by the state board to be vehicles whose primary use is noncommercial personal transportation in the state. The bill required that CARB set GHG emissions standards for motor vehicles manufactured in 2009 and all subsequent model years. The 2009–2012 standards resulted in a reduction in approximately 22% of GHG emissions compared to emissions from the 2002 fleet, and the 2013– 2016 standards resulted in a reduction of approximately 30% compared to the 2002 fleet.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global-warming gases with requirements for greater numbers of zero-emissions vehicles into a single package of standards called Advanced Clean Cars (ACC). By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global-warming gases and 75% fewer smog-forming emissions (CARB 2020).

In 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program (SAFE-1)(84 Fed. Reg. 51310), which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. In March 2020, Part Two was issued which set CO<sub>2</sub> emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. In March 2022, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate. EPA's action concludes its reconsideration of the 2019 SAFE-1 rule by finding that the actions taken under the previous administration as a part of SAFE-1 were decided in error and are now entirely rescinded.

### Advanced Clean Cars Program

The ACC I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle (LEV) regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for zero-emission vehicles (ZEV) that contributes to both types of emission reductions (CARB 2021a). The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025 cars will emit 75% less smog-forming pollution than the average new car sold in 2015. The ZEV program will act as the focused technology of the ACC I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid EVs in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021a). The main objectives of ACC II are:

1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

The ACC II rulemaking package was adopted by CARB on August 25, 2022.

### Advanced Clean Trucks Program

The purpose of the ACT Regulation (June 2020) is to accelerate the market for zero-emission vehicles in the medium- and heavy-duty truck sector and to reduce emissions NO<sub>x</sub>, fine particulate matter, TACs, GHGs, and other criteria pollutants generated from on-road mobile sources (CARB 2021b). Requiring medium- and heavy-duty vehicles to transition to zero-emissions technology will reduce health risks to people living in and visiting California and is needed to help California meet established near- and long-term air quality and climate mitigation targets. The regulation has two components including (1) a manufacturer sales requirement and (2) a reporting requirement:

1. Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines will be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales.

2. **Company and fleet reporting:** Large employers including retailers, manufacturers, brokers and others will be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, will be required to report about their existing fleet operations. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

## Environmental Setting

The primary energy source required for the project would be petroleum during short-term construction. According to the U.S. Energy Information Administration, California used approximately 683 million barrels of petroleum in 2017 (EIA 2019). This equates to a daily use of approximately 1.9 million barrels of petroleum. There are 42 U.S. gallons in a barrel, so California consumes approximately 78.6 million gallons of petroleum per day, adding up to an annual consumption of 29 billion gallons of petroleum. However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce vehicle miles traveled.

- a) ***Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

### Construction

**Electricity.** Electric power for as-necessary electronic equipment would be provided by Alameda Municipal Power (AMP). The amount of electricity used during construction would be minimal because typical demand would be generated by electrically-powered hand tools. Lighting for construction activities is not anticipated. Furthermore, electric demand would be intermittent (as-needed) and limited to the duration of construction (4-6 weeks). Therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity.

**Natural Gas.** Natural gas is not anticipated to be required during construction of the project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed below. Therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas.

**Petroleum.** The primary energy consumed during construction would be associated with petroleum usage. Potential impacts were assessed for off-road equipment, marine vessels, and on-road vehicle trips during construction, as provided by the CalEEMod and the Harborcraft, Dredge, and Barge Emission Factor Calculator outputs (see Appendix B). Heavy-duty equipment associated with construction would rely on diesel fuel, as would vendor trucks involved in delivery of materials to the project site and a tugboat. Notably, no haul trucks are anticipated since there would not be grading and all debris from demolition would be transported via tugboat/barge. Construction workers would travel to and from the project site throughout the duration of construction. It is assumed in this analysis that construction workers would travel in gasoline-powered light-duty vehicles. The small skiff was also assumed to use gasoline. Fuel consumption from construction equipment and vehicle trips was estimated by converting the total carbon dioxide (CO<sub>2</sub>) emissions anticipated to be generated by the construction of the project to gallons using conversion factors for CO<sub>2</sub> to gallons of gasoline or diesel. The conversion factor for gasoline is

8.78 kilograms per metric ton (MT) CO<sub>2</sub> per gallon, and the conversion factor for diesel is 10.21 kilograms per MT CO<sub>2</sub> per gallon (The Climate Registry 2021). Appendix B lists the assumed equipment usage, vehicle trips for construction, and marine vessel assumptions for the project.

The estimated diesel fuel usage from construction equipment, vendor trucks, and tugboat, as well as estimated gasoline fuel usage from worker vehicles and the small skiff are shown in Table 3.6-1.

**Table 3.6-1. Project Construction Petroleum Demand**

Phase	Off-Road Equipment (diesel)	Vendor Trucks (diesel)	Tugboat (diesel)	Worker Vehicles (gasoline)	Small Skiff (gasoline)
	Gallons				
Demolition/Construction	4,207.68	94.73	1,081.24	154.26	2,355.57
<b>Total Petroleum Consumed</b>	<b>7,893.48</b>				

Notes: See Appendix B for details.

As shown in Table 3.6-1, the project is estimated to consume approximately 7,893 gallons of petroleum during the total demolition and construction activity. Notably, the project will be subject to CARB’s In-Use Off-Road Diesel Vehicle Regulation that applies to certain off-road diesel engines, vehicles, or equipment greater than 25 horsepower. The regulation: (1) imposes limits on idling, requires a written idling policy, and requires a disclosure when selling vehicles, (2) requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled, (3) restricts the adding of older vehicles into fleets starting on January 1, 2014, and (4) requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). The fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the Best Achievable Control Technology (BACT) requirements. Overall, because the project would not be unusual as compared to overall local and regional demand for energy resources and would not involve characteristics that require equipment that would be less energy-efficient than at comparable construction sites in the region or state, the petroleum consumption associated with the project would not be considered inefficient or wasteful.

**Operations**

The project would not result in a change in a substantive change in operations. Therefore, the potential increase in energy consumption during operations would be negligible.

**Summary**

*Less-than-Significant Impact.* As provided in the discussion above, implementation of the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Impacts would be less than significant and no mitigation is required.

**b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

*Less-than-Significant Impact.* As discussed in Section 3.6(a), the project would not result in wasteful, inefficient, and unnecessary consumption of energy during construction and no increase in energy demand

from operations. During construction, the project would comply with CARB’s ATCMs, one of which restricts heavy-duty diesel vehicle idling time to 5 minutes. Additionally, energy use during construction would be minimal and temporary. During operations, the project would not result in an increase in energy consumption as compared to the existing terminal; however, the project would continue to support the reduction of single-occupant vehicle use and associated petroleum consumption by providing ferry service in the Bay Area. Impact would be less than significant, and no mitigation is required.

### 3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VII. GEOLOGY AND SOILS – Would the project:</b>				
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Regulatory Framework

The California Building Code (CBC) contains the minimum standards for design and construction in California. The CBC addresses, among other topics, design criteria for seismic hazards. Prior to issuance of a building permit for the project, the project sponsor would be required to complete a site-specific design-level geotechnical investigation to identify the specific geologic hazards that could affect the project, evaluate soil conditions, and provide design recommendations to achieve applicable CBC seismic safety design requirements.

Title 24, Part 11, Section 5.106 of the CBC (or CALGreen Code), outlines BMPs to prevent the pollution of stormwater runoff from construction activities for projects that would disturb less than one acre. BMPs include erosion control, sediment control, construction scheduling practices, dewatering activities, material handling, vehicle/equipment management, spill prevention and control, among others.

### Environmental Setting

A Preliminary Geotechnical Report was prepared by ENGEO in January 2022 (Appendix D). The report includes an assessment of geotechnical conditions associated with the proposed project, subsurface data, and preliminary recommendations. Pertinent information from the report is included herein.

The project site is located in Alameda County and within the California Coast Ranges, a series of northwesterly trending uplifted ranges and intervening valleys. A limited subsurface exploration, involving two cone penetration tests (CPTs), was performed at the project site on October 28, 2021. In general, deposits encountered at the project site include, from youngest to oldest, (1) artificial deposits (sand, gravel, and clay), (2) Young Bay Mud (YBM) deposits (silty clay), (3) San Antonio Formation (silty sand), and Old Bay Clay (silt or clay with interbedded sand deposits). The project site can be divided into two generalized subsurface profiles – shoreside and offshore. The shore-side subsurface profile consists of loose to medium dense sandy artificial fill, soft YBM, and dense sandy or stiff clayey San Antonio Formation. The offshore subsurface profile consists of softer (relative to shore-side) YBM overlying San Antonio Formation.

Numerous small earthquakes occur every year in the San Francisco Bay Region, and larger earthquakes have been recorded and can be expected to occur in the future. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and no known surface expression of active faults is believed to exist within the site. The nearest active fault, the Hayward Fault, is located approximately 5.4 miles from the site.

According to the California Geological Survey (CGS), the site is mapped within an area susceptible to earthquake-induced liquefaction. A liquefaction analysis was performed for the project site and indicated that potential



liquefaction-induced ground settlement up to approximately 1 in may occur. The potential for lateral spreading was determined to be low.

The project site is mapped within a tsunami hazard zone on the CGS tsunami hazard map for the County of Alameda, indicating that it is within inundation limits corresponding to a 975-year average return period tsunami event (ENGE0 2022).

**a) *Would the project 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.***

**No Impact.** As described above, the project site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and no known surface expression of active faults is believed to exist within the site. Because of this, ground rupture associated with a known earthquake fault is unlikely at the subject property (ENGE0 2022). The project would not expose people or structures to adverse effects caused by the rupture of a known fault. There would be no impact and no mitigation is required.

**ii) *Strong seismic ground shaking?***

**Less-than-Significant Impact.** As previously discussed, the San Francisco Bay Region, which includes the project site, is subject to numerous earthquakes every year. As described in criterion (a-i), above, no known active faults exist within the site. The project would be constructed consistent with the CBC Title 24, which includes standards intended to protect structures from earthquake-related seismic activity. The construction and operation of the project would not exacerbate existing seismic conditions. Impacts would be less than significant and no mitigation is required.

**iii) *Seismic-related ground failure, including liquefaction?***

**Less-than-Significant Impact.** As discussed above, the project site is mapped within an area susceptible to earthquake-induced liquefaction. A liquefaction analysis performed by ENGE0 indicated that potential liquefaction-induced ground settlement up to approximately 1-in may occur within the site (ENGE0 2022). As described in Chapter 2, "Project Description," most of the project components would be positioned within the shoreside of the project site, within the Oakland Inner Harbor. Liquefaction or other ground failure would not be a hazard for features within the Oakland Inner Harbor. Further, the project would comply with CBC Title 24, which includes specific design requirements to reduce damage from ground failure. Compliance with current building codes, would address project-related risks from seismic-related ground failure. Impacts would be less than significant, and no mitigation is required.

**iv) *Landslides?***

**No Impact.** The project site is located in a developed area of the Oakland Inner Harbor on flat terrain; there is no risk of landslides in such terrain. There would be no impact, and no mitigation would be required.

**b) *Would the project result in substantial soil erosion or the loss of topsoil?***

Less-than-Significant Impact. Ground disturbance associated with project implementation would consist of installation of the monopile, pipe piles, guide piles, and donut fender piles, as further described in Chapter 2, "Project Description." The project would be required to comply with the current CBC, which provides specifications related to soil compaction and stability. Further, the project would be required to adhere to various federal, State, and regional water quality standards, including BMPs (i.e., erosion control, site stabilization, etc.) as outlined in Title 24 of the CALGreen Code. Compliance with applicable regulations, including BMPs, would address project-related soil erosion/loss of topsoil. Impacts would be less than significant, and no mitigation is required.

**c, d) *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

Less-than-Significant Impact. As described above, the project site consists of a variety of soil types that range in density. Additionally, potential liquefaction-induced ground settlement up to approximately 1-in may occur at the project site, however, the potential for lateral spreading at the site was determined to be low (ENGEO 2022). Piles installed to support terminal components would not be affected by expansive soil properties because they would be continually saturated (i.e., they would not experience drying and wetting conditions that cause soil to shrink and swell). Further, project compliance with the CBC, which provides specifications related to soil compaction and stability, would ensure that project implementation would not result in on- or off-site adverse geologic conditions such as landslide, lateral spreading, subsidence, liquefaction, shrink-swell potential, or collapse such that risks to life or property would occur. Impacts would be less than significant and no mitigation is required

**e) *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

No Impact. The project would not involve the use of septic tanks or alternative wastewater disposal systems. There would be no impact, and no mitigation is required.

**f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

Less-than-Significant Impact. The project site and the immediate surrounding area are composed of Bay fill and other fill materials that typically do not preserve or contain unique paleontological resources. Project construction would involve earthmoving activities associated with installation of new piles that would disturb Bay Mud and other geologically young deposits that are submerged. These activities would be limited to individual, discrete, borings beneath the water and would not involve excavation. Although the sediment disturbed by pile removal and installation could contain invertebrate remains of shelled animals, the resources are ubiquitous throughout the Bay Area and are not considered unique or significant paleontological resources. In addition, past dredging and filling activities within the surrounding area of the Oakland Inner Harbor would likely have destroyed or compromised the integrity of fossils if they were present. Impacts would be less than significant, and no mitigation is required.



### 3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VIII. GREENHOUSE GAS EMISSIONS – Would the project:</b>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Regulatory Framework

Also refer to Section 3.6 for relevant regulations that are also applicable to Energy.

#### Federal

##### *Massachusetts v. EPA*

In *Massachusetts v. EPA* (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The Administrator found that elevated concentrations of GHGs— carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations. This is the “endangerment finding.”
- The Administrator further found the combined emissions of GHGs—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the “cause or contribute finding.”

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

## State

The state has taken a number of actions to address climate change. These include executive orders (EOs), legislation, and CARB plans and requirements. A few key regulations are summarized below.

### EO S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

EO S-3-05 also directed the California Environmental Protection Agency to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued reports from 2006 to 2010.

### AB 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

### SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and, requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

### CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code, Section 38561(a)), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The *Climate Change Scoping Plan: A Framework for Change* (Scoping Plan) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the

transformations needed to achieve the state's long-range climate objectives. The key elements of the Scoping Plan include the following (CARB 2008):

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
2. Achieving a statewide renewable energy mix of 33%
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85% of California's GHG emissions
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets
5. Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS; 17 Cal. Code Regs., Section 95480 et seq.)
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State of California's long-term commitment to AB 32 implementation

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15 percent from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012 (CARB 2014). The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050 including: energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings and industrial machinery; decarbonizing electricity and fuel supplies; and, the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level, using more recent global warming potentials identified by the Intergovernmental Panel on Climate Change, from 427 MMT CO<sub>2e</sub> to 431 MMT CO<sub>2e</sub>.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in S-3-05. The Governor called on California to pursue a new and ambitious set of strategies, in line with the five climate change pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In the summer of 2016, the Legislature affirmed the importance of addressing climate change through passage of Senate Bill 32 (SB 32) (Pavley, Chapter 249, Statutes of 2016).

In December 2017, CARB adopted *California's 2017 Climate Change Scoping Plan* (2017 Scoping Plan) for public review and comment (CARB 2017). The 2017 Scoping Plan builds on the successful framework established in the

initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the state's climate change priorities to 2030 and beyond. The strategies' known commitments include implementing renewable energy and energy efficiency (including the mandates of SB 350), increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%.

For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15 percent reduction goal with a recommendation to aim for a community-wide goal of no more than 6 MT CO<sub>2</sub>e per capita by 2030 and no more than 2 MT CO<sub>2</sub>e per capita by 2050, which are consistent with the state's long-term goals. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through CAPs) and provide more information regarding tools CARB is working on to support those efforts. It also recognizes the CEQA streamlining provisions for project level review where there is a legally adequate CAP.<sup>4</sup>

When discussing project-level GHG emissions reduction actions and thresholds in the context of CEQA, the 2017 Scoping Plan states that "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development" for project-level CEQA analysis, but also recognizes that such a standard may not be appropriate or feasible for every development project. The 2017 Scoping Plan further provides that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

CARB released the *Draft 2022 Scoping Plan Update* in May 2022, which outlines the state's plan to reach carbon neutrality by 2045 or earlier, while also assessing the progress the state is making toward reducing GHG emissions by at least 40 percent below 1990 levels by 2030, as is required by SB 32 and laid out in the 2017 Scoping Plan. The carbon neutrality goal requires CARB to expand proposed actions from only the reduction of anthropogenic sources of GHG emissions to also include those that capture and store carbon (e.g., through natural and working lands, or mechanical technologies). The carbon reduction programs build on and accelerate those currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high global warming potential (GWP); providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen<sup>5</sup> (CARB 2022).

The *Draft 2022 Scoping Plan Update* also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state's carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage (CCS) from anthropogenic point sources, where CO<sub>2</sub> is captured

---

<sup>4</sup> *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490; *San Francisco Tomorrow et al. v. City and County of San Francisco* (2015) 229 Cal.App.4th 498; *San Franciscans Upholding the Downtown Specific Plan v. City & County of San Francisco* (2002) 102 Cal.App.4th 656; *Sequoyah Hills Homeowners Assn. V. City of Oakland* (1993) 23 Cal.App.4th 704, 719.

<sup>5</sup> Green hydrogen refers to hydrogen that is generated by renewable energy or from low-carbon power, and has significantly lower associated carbon emissions than grey hydrogen, which is produced using natural gas and makes up the majority of hydrogen production. For the purposes of the *Draft 2022 Scoping Plan*, the term "green hydrogen" is not limited to only electrolytic hydrogen produced from renewables.

as it leaves a facility's smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete); and carbon dioxide removal (CDR) from ambient air, through mechanical (e.g., direct air capture with sequestration [DACs]) or nature-based (e.g., management of natural and working lands) applications.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32, SB 32, and the EOs; it also establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. A project is considered consistent with the statutes and EOs if it would meet the general policies in reducing GHG emissions in order to facilitate the achievement of the state's goals and would not impede attainment of those goals. While the 2022 Scoping Plan Update is still in draft form, the guidance and policies contained in the update are anticipated to largely remain unchanged. The public meeting to consider the *Draft 2022 Scoping Plan Update* was held in June 2022, and it is anticipated that adoption of the Plan will occur in the fall of 2022.

## Local

### Bay Area Air Quality Management District

On April 20, 2022, the BAAQMD Board of Directors held a public meeting and adopted the proposed CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans. The BAAQMD "Thresholds for Land Use Projects (Must Include A or B)" are as follows (BAAQMD 2022):

A. Projects must include, at a minimum, the following project design elements:

1. Buildings

- a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
- b. The project will not result in any wasteful, inefficient, or unnecessary electrical usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

2. Transportation

- a. Achieve compliance with electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
- b. Achieve a reduction in project-generated vehicle miles traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor's Office of Planning and Research's Technical Advisory on Evaluating Transportation Impacts in CEQA:
  - i. Residential projects: 15 percent below the existing VMT per capita
  - ii. Office projects: 15 percent below the existing VMT per employee
  - iii. Retail projects: no net increase in existing VMT.

B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).

## Alameda Climate Action and Resiliency Plan

In September 2019, the City of Alameda adopted the Alameda Climate Action and Resiliency Plan (CARP), which set a goal to reduce emissions by 50 percent below 2005 levels by 2030. Achieving this goal means the City must carry out already committed to actions (i.e., Transportation Choices Plan and the Zero Waste Implementation Plan) and new actions proposed in the CARP in the sectors of transportation, buildings, sequestration, and waste (City of Alameda 2019).

## Environmental Setting

Climate change refers to any significant change in measures of climate (e.g., temperature, precipitation, or wind patterns) lasting for an extended period of time (i.e., decades or longer). Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and buildup of heat in the atmosphere near Earth's surface (the troposphere). The greenhouse effect is a natural process that contributes to regulating Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, sulfur hexafluoride, and nitrogen trifluoride (see also CEQA Guidelines Section 15364.5). The three GHGs evaluated herein are CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O because these gases would be emitted during the project's construction.

The Intergovernmental Panel on Climate Change developed the GWP concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO<sub>2</sub>; therefore, GWP-weighted emissions are measured in metric tons (MT) of CO<sub>2</sub> equivalent (CO<sub>2</sub>e). Consistent with CalEEMod version 2020.4.0, this GHG emissions analysis assumed the GWP for CH<sub>4</sub> is 25 (i.e., emissions of 1 MT of CH<sub>4</sub> are equivalent to emissions of 25 MT of CO<sub>2</sub>), and the GWP for N<sub>2</sub>O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

**a) *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

**Less-than-Significant Impact.** Construction of the project would result in GHG emissions, which are primarily associated with use of off-road construction equipment, on-road vendor (material delivery) trucks, worker vehicles, and marine vessels. A detailed depiction of the construction assumptions is included in Appendix B. The estimated project-generated GHG emissions from demolition and construction activities are shown in Table 3.8-1.



**Table 3.8-1. Estimated Annual Construction Greenhouse Gas Emissions**

Construction	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
	Metric Tons per Year			
Off-road Equipment and On-road Vehicles	45.28	<0.01	<0.01	45.46
Marine Vessels	31.72	<0.01	<0.01	31.83
<b>Total Project GHGs</b>	<b>77.29</b>			

Source: Appendix B.

Notes: CO<sub>2</sub> = carbon dioxide; CH<sub>4</sub> = methane; N<sub>2</sub>O = nitrous oxide; CO<sub>2</sub>e = carbon dioxide equivalent.

As shown in Table 3.8-1, the estimated total GHG emissions during construction would be approximately 77 MT CO<sub>2</sub>e over the construction period. As with project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the project would be short term in nature, lasting only for the duration of the construction period (30 working days), and would not represent a long-term source of GHG emissions. Notably, the BAAQMD has stated that there is no proposed construction-related climate impact threshold at this time, since GHG emissions from construction represent a very small portion of a project’s lifetime GHG emissions (BAAQMD 2022). The BAAQMD thresholds for land use projects are designed to address operational GHG emissions which represent the vast majority of project GHG emissions. Additionally, the project would result in refurbishment of the AMS Ferry Terminal, which helps reduce single-occupant vehicle use and associated GHG emissions in the Bay Area. Based on the negligible GHG emissions generated by construction, and since the project would not result in an increase in long-term operational GHG emissions, and it would support alternative transportation in the Bay Area, potential emissions contributions are not cumulatively considerable. Impacts would be less than significant and no mitigation is required.

**b) *Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

**Less-than-Significant Impact.** As mentioned previously, the City developed the CARP to identify strategies by which the City would reduce GHG emissions to 50 percent below 2005 levels by 2030, which exceeds the statewide goal (City of Alameda 2019). Overall, as discussed in GHG impact a), the project would result in minimal GHG emissions from construction and would not result in increased GHG emissions during operations. In addition, the project would support the reduction of single-occupant vehicle use and associated GHGs by continuing to provide ferry service in the Bay Area. Based on these considerations, the project would not conflict with the City’s CARP or impede the statewide trajectory towards the SB 32 GHG reduction goals.

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017), provides a framework for actions to reduce California’s GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. As such, the Scoping Plan is not directly applicable to specific projects. Relatedly, in the Final Statement of Reasons for the Amendments to the CEQA Guidelines, the California Natural Resources Agency (CNRA) observed that “[t]he [Scoping Plan] may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan” (CNRA 2009). Under the Scoping Plan, however, there are several state regulatory measures aimed at the

identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., LCFS), among others. To the extent that these regulations are applicable to the project, the project would comply with all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

In summary, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Impacts would be less than significant and no mitigation is required.

### 3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>IX. HAZARDS AND HAZARDOUS MATERIALS – Would the project:</b>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site that 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Regulatory Framework

### California Occupational Safety and Health Administration

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are typically more stringent than federal OSHA regulations and are presented in Title 8 of the CCR. Cal/OSHA conducts onsite evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Title 8 of the CCR also includes regulations that provide for worker safety when blasting and explosives are utilized during construction activities. These regulations identify licensing, safety, storage, and transportation requirements related to the use of explosives in construction.

### Environmental Setting

The State Water Resources Control Board’s (SWRCB) GeoTracker website along with the California Department of Toxic Substances Control’s (DTSC) Envirostor website provide a comprehensive list of the facilities and sites identified as meeting the “Cortese List” requirements pursuant to Government Code Section 65962.5. The SWRCB Geotracker website provides data relating to leaking underground storage tanks and other types of soil and groundwater contamination, along with associated cleanup activities. Three hazardous materials sites were identified within 0.5 miles of the project site, all of which have previously undergone site investigation, remediation, and closure (SWRCB 2022). As such, no active hazardous materials sites were identified within the project vicinity. The DTSC Envirostor website provides data related to hazardous materials spills and clean ups. No active hazardous waste facilities are located within 0.5 miles of the project site. One site, Miller Elementary School, which is no longer operational, is considered open for investigation, however no action from DTSC is required. (DTSC 2022).

The nearest school is Ruby Bridges Elementary School, which is approximately 0.75 mile southeast of the project site.

The nearest airport, Oakland International Airport, is located approximately 5.5 miles southeast of the project site. The project site is outside of the airport influence area (Alameda County 2010).

The Alameda County Emergency Operations Plan (EOP) establishes the foundational policies and procedures that define how Alameda County will effectively prepare for, respond to, recover from, and mitigate against natural or human-caused disasters. It provides a description of the emergency management organization and how it is activated. (Alameda County 2012).

The City of Alameda, which includes the project site, is within a Local Responsibility Area (LRA) and is designated as a non-very high fire hazard severity zone (VHFHSZ). The entire City of Alameda is an urbanized area and there are no wildlands in proximity to the site.

**a) *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

**Less-than-Significant Impact.** Equipment used during construction of the project would require the use of oil, diesel fuel, gasoline, hydraulic fluid, and other liquid materials that would be considered hazardous if improperly stored or handled. Operation of the project is not anticipated to involve the use of hazardous materials. WETA would be required to comply with existing laws and regulations regarding the transportation, use, and disposal of hazardous materials during construction and operation. Specifically, the project would be required to comply with the California Environmental Protection Agency's Unified Program, which protects Californians from hazardous waste and hazardous materials by ensuring consistency throughout the state regarding the implementation of administrative requirements, permits, inspections, and enforcement at the local regulatory level. Regulated activities would be managed by the Alameda County Department of Environmental Health, which is the designated Certified Unified Program Agency, and in accordance with the regulations included in the Unified Program (e.g., hazardous materials release response plans and inventories, California Uniform Fire Code hazardous material management plans and inventories). Furthermore, the Department of Transportation Hazardous Materials Regulations cover all aspects of hazardous materials handling and transportation. Parts 130 (Oil Spill Prevention and Response) and 172 (Emergency Response) would apply to project construction activities. Compliance with applicable regulations would reduce the potential for accidental release of hazardous materials during project construction.

The project would be required to comply with existing laws and regulations regarding hazardous materials. These regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Compliance with applicable regulations would address risks related to the transportation, use, and disposal of hazardous materials. Impacts would be less than significant, and no mitigation is required.

**b) *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

**Less-than-Significant Impact.** As discussed above, there are no existing active hazardous materials sites at the project site or within 0.5 miles. However, project construction could involve the transport, storage, use, and disposal of hazardous materials. Implementation of the project would comply with existing laws and regulations regarding the transportation, use, and disposal of hazardous materials in relation to construction and operation of the refurbished terminal. These regulations are specifically designed to protect the public health and the environment and must be adhered to during project construction and operation. Impacts would be less than significant and no mitigation is required.

- c) ***Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

No Impact. Ruby Bridges Elementary School is located 0.75 miles to the southwest of the project. No schools are proposed in the project area. Therefore, the project would not result in the release of hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. There would be no impact, and no mitigation is required.

- d) ***Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

No Impact. As discussed above, review of the GeoTracker and Envirostor databases determined that no designated hazardous materials sites are located on the project site. Three former hazardous waste facilities were located within 0.5 miles of the site, however they are not active and are considered closed. Thus, no active designated hazardous materials sites are on or near the project site. There would be no impacts, and no mitigation is required.

- e) ***For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?***

No Impact. The project area is not located within an airport land use plan, within 2 miles of a public airport, or in the vicinity of a known private airstrip. The project site is located approximately 5.5 miles northwest of the Oakland International Airport and is outside of the airport influence area as well as the 60-community noise equivalent level (CNEL) airport noise contour (Alameda County 2010). Project construction and operation would not result in any safety hazards or excessive noise within the vicinity of the airport. There would be no impact, and no mitigation is required.

- f) ***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

No Impact. The project would include refurbishment and upgrades to the existing AMS Ferry Terminal in Alameda County. Construction and operation would not impede vehicular travel on local roadways. During the construction period, equipment/personnel staging would occur within the terminal parking lot and emergency access and circulation would be maintained at all times. The project does not propose any modifications or revisions to existing emergency response or evacuation plans within the City or Alameda County. There would be no impacts, and no mitigation is required.

- g) ***Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?***

No impact. The project site is within a developed area in the City of Alameda. Based on the California Department of Forestry Resources Very High Fire Hazard Severity Zone Map, the project site is within the Local Responsibility Area and is not located within an area identified as a high Fire Hazard Severity Zones (FHSZ) (CAL FIRE 2022). Construction and operation of the project would not expose people or structures

to a significant risk of loss, injury, or death involving wildland fires. There would be no impacts and no mitigation is required.

### 3.10 Hydrology and Water Quality

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

#### Regulatory Framework

##### Clean Water Act

The objective of the federal Clean Water Act (CWA) (33 USC 1251 et seq.) is to restore and maintain the chemical,

physical, and biological integrity of the nation's waters. Specific sections of the CWA control the discharge of pollutants and wastes into the marine and aquatic environments. The major section of the CWA that would apply to the proposed project is the National Pollutant Discharge Elimination System (NPDES) (Section 402). In the event maintenance dredging is needed, those activities would be regulated under Sections 401 and 404.

### Water Quality Control Act

The Water Quality Control Act (Porter-Cologne Act) (California Water Code Sections 13000 et seq.; CCR Title 23, Chapter 3, Subchapter 15) is the primary state regulation that addresses water quality. The requirements of the Act are implemented by the State Water Resources Control Board (SWRCB) at the state level, and RWQCB at the regional level. Under Subchapter 15, wastes that cannot be discharged directly or indirectly to waters of the state (and therefore must be discharged to land for treatment, storage, or disposal) are classified to determine specifically where such wastes may be discharged. This classification requirement would apply to dredged material or fill, if any, that would be disposed of in an upland environment.

### California Green Building Code

Title 24, Part 11, Section 5.106 of the California Building Code (or CALGreen Code), outlines BMPs to prevent the pollution of stormwater runoff from construction activities for projects that would disturb less than one acre. BMPs include erosion control, sediment control, construction scheduling practices, dewatering activities, material handling, vehicle/equipment management, spill prevention and control, and others.

### San Francisco Bay Basin Plan

The Water Quality Control Plan for San Francisco Bay Basin Plan (Basin Plan) identifies surface waters in the region as consisting of inland surface water (freshwater lakes, rivers, and streams), estuaries, enclosed bays, and ocean waters. The Basin Plan describes the water quality control measures that contribute to the protection of the beneficial uses of the Bay watershed. The Basin Plan identifies beneficial uses for each segment of the Bay and its tributaries, water quality objectives for the reasonable protection of the uses, and an implementation plan for achieving these objectives. Beneficial uses of the Bay include commercial and sport fishing, estuarine habitat, industrial water supply, fish migration, navigation, industrial process water supply, preservation of rare and endangered species, contact and noncontact water recreation, shellfish harvesting, fish spawning, and wildlife habitat.

BCDC is responsible for implementing the McAtteer-Petris Act (PRC Sections 66600 et seq.). The Act directs BCDC to exercise its authority to issue or deny permit applications for placing fill, extracting minerals, or changing the use of any land, water, or structure within the area of its jurisdiction (San Francisco Bay waters and a 100-foot-wide shoreline band inland from the high tide line). BCDC also carries out determinations of consistency with the Federal Coastal Zone Protection Act for federally sponsored projects. It also specifies no creosote-treated wood pilings or other structures may be placed in any area subject to tidal action.

### Environmental Setting

The project site lies within the San Francisco Bay Hydrologic Region (HR) surface watershed, which covers 4,603 square miles, and includes all of San Francisco and portions of Marin, Sonoma, Napa, Solano, San Mateo, Santa Clara, Contra Costa, and Alameda counties. The project site is located on the northern shoreline of the City of Alameda, which lies in between Oakland-Alameda Estuary ("Estuary"), and San Francisco Bay.

## Oakland Inner Harbor and San Francisco Bay

The project site is located in the central portion of the City of Alameda between Oakland Inner Harbor and San Francisco Bay, Central Basin. The project site lies adjacent to the Oakland Inner Harbor – a tidal canal, part of the Oakland Estuary – originally a tidal slough that originated in a vast marsh stretching from Lake Merritt to Brooklyn Basin. The Oakland Estuary is influenced by both freshwater and marine water. The Estuary receives freshwater inflow from a combination of natural creeks, human-made stormwater drainage facilities, and direct surface runoff. The Estuary is also influenced by the marine waters of San Francisco Bay and is subject to tidal currents. Sediment from the City of Oakland’s shoreline and creeks is carried by the tidal current to shoals and sandbars, causing siltation of the shipping channels that periodically require dredging.

## Groundwater

The project site lies in the East Bay Plain of the San Francisco Bay HR. Subsurface groundwater at the project site occurs at shallower depths consistent with the low existing ground elevations. During the most recent geotechnical investigation near the site, groundwater was observed at approximately 6.5 below ground surface (ENGEO 2022).

## Flood/Tsunami Hazards

The landside of the project site is located in a special flood hazard area (Zone AE), or areas with a 1 percent annual chance of flooding (FEMA 2022). The shoreside of the project site is located entirely within the Oakland Inner Harbor.

The project site is mapped within a tsunami hazard zone on the CGS tsunami hazard map for the County of Alameda, indicating that it is within inundation limits corresponding to a 975-year average return period tsunami event (ENGEO 2022).

**a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***

**Less-than-Significant Impact.** The applicable water quality standards for the portion of the Bay where the proposed project is situated are set forth in the Basin Plan, which is administered by the San Francisco RWQCB. The major waterside construction activities would include replacement of existing terminal structures and installation of pipe piles, guide piles, donut fender piles, and a monopile. During construction activities, installation of piles could mobilize underwater sediments into the water column. Any activity involving the use of construction products and heavy equipment could also result in the incidental release of construction materials (e.g., sawdust, metal fragments, concrete), or the accidental spill of construction materials (e.g., paints and solvents) or substances commonly used in construction equipment (e.g., fuels, oil, grease). Compliance with applicable water quality regulations would reduce the potential for waterside activities to affect water quality in a manner that would violate water quality standards. During landside activities, including utility connections and removal/replacement of the bridge structure, spills from construction products and leaks from the equipment have the potential to enter stormwater that flows across the site toward the Bay. Stormwater runoff would be controlled through best management practices outlined in Title 24, Part 11, of the CALGreen Code, which would be required through project implementation. Impacts would be less than significant and no mitigation is required.



- b) ***Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

Less-than-Significant Impact. The project involves replacement and upgrades to the existing AMS Ferry Terminal within the Oakland Inner Harbor and along the City of Alameda shoreline. No groundwater is expected to be encountered during construction activities because construction activities would largely take place along the shoreline, rather than landside. The project site is currently developed with both pervious and impervious surfaces. Refurbishment of the existing AMS Ferry Terminal would not substantially alter impervious surfaces because most of the project structures would be located within the water. Therefore, the project would not interfere with nor adversely affect groundwater supplies or recharge. Impacts would be less than significant and no mitigation is required.

- c) ***Would the project 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?***

Less-than-Significant Impact. As previously discussed, project construction activities involving replacement of structures and installation of piles would primarily occur within the shoreline (waterside) portion of the project. Landside components include minor utility upgrades, the bridge structure, and construction of new piles to support it. Installation of landside components and construction are not anticipated to result in a significant temporary or permanent modification the shoreline such that it could be susceptible to erosion or cause siltation. Further, the project would comply with BMPs set forth in Title 24 of the CALGreen code intended to reduce or eliminate the potential for project-related impacts such as erosion or siltation that would otherwise degrade local water quality. As such, the project would not substantively alter the existing drainage pattern on land. Impacts would be less than significant, and no mitigation is required.

- ii) ***Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?***

No Impact. Project implementation would include replacement and upgrades to structures at the existing AMS Ferry Terminal in addition to minor utility upgrades. Structures to be replaced are located primarily on-site waterside, within the Oakland Inner Harbor. No new permanent impermeable surfaces would be introduced within the project site such that increased surface water/runoff would result during a rain or storm event. No increase in- on or off-site flooding is anticipated. There would be no impact and no mitigation is required.

- 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?***

No Impact. As described above, project implementation would not result in new, permanent impermeable surfaces that would change stormwater peak flows, volumes, or result in changes in stormwater quality compared to existing conditions. Replacement of terminal structures and installation of piles would occur

within the Oakland Inner Harbor and would not contribute flows to a stormwater drainage system. There would be no impact and no mitigation would be required.

**iv) *Impede or redirect flood flows?***

**No Impact.** As described above, the landside of the project site is located in a special flood hazard area (Zone AE), or areas with a 1 percent annual chance of flooding. The shoreside is located within the Oakland Inner Harbor. Upgrades and replacement of existing terminal structures would have no effect on tidal flooding that could redirect or impede flood flows landside of the terminal because the project would not involve placement of fill or create barriers to flow. There would be no impact and no mitigation is required.

**d) *In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?***

**Less-than-Significant Impact.** See criterion (c-iv) for discussion regarding floor hazards. Portions of San Francisco Bay are susceptible to tsunami hazard. However, the proposed project would not involve any occupancy of permanent structures that could be damaged by tsunami. The terminal structure, although modified as part of the project, could be subject to flooding by tsunami. Tsunami-induced flooding at the site could damage the terminal features or a vessel moored there, but people would not be exposed to any risk because evacuation procedures implemented by WETA and the City of Alameda would ensure populations at risk would not be present. Seiche historically has not resulted in substantial flooding or damage in the San Francisco Bay Area. Given that marine facilities can be readily replaced (although costly) and that landside facilities are above the predicted inundation level, potential risks related to release of pollutants is low. Impacts would be less than significant, and no mitigation is required.

**e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

**Less-than-Significant Impact.** Implementation of the project would not involve the use of groundwater. Earthmoving activities associated with project construction would consist of installation of new piles to support replacement of terminal structures and would occur within the Oakland Inner Harbor. Project construction activities would comply with the CBC, including BMP requirements intended to reduce water quality impacts (e.g., erosion and siltation control). Therefore, the project would not conflict with or obstruct a water quality control plan or groundwater management plan. Impacts would be less than significant and no mitigation is required.



### 3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XI. LAND USE AND PLANNING – Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Regulatory Framework/Environmental Setting

The project site is located in the City of Alameda and is designated as General and Maritime Industry on the Alameda General Plan land use map. Surrounding uses include public parks and open space, medium-density residential, low-density residential, and mixed-use (City of Alameda 2021b). The project site is zoned as General Industrial (M- 2) (City of Alameda 2019).

**a) *Would the project physically divide an established community?***

**No Impact.** The construction and operation of the project would occur on a site that is surrounded by development and the Oakland Inner Harbor and would not physically divide an established community. Rather, the project would support continued and improved operation of the AMS Ferry Terminal to provide transportation options to the public. There would be no impact and no mitigation is required.

**b) *Would the project 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?***

**No Impact.** The project would not result in any land use changes, and would not conflict with any adopted plans, policies, or regulations adopted for avoiding or mitigating an environmental effect. There would be no impact and no mitigation would be required.

### 3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XII. MINERAL RESOURCES</b> – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Regulatory Framework

No plans, policies, regulations, or laws related to mineral resources are applicable to the project.

#### Environmental Setting

Regionally significant mineral deposits are located in the range of coastal mountains that extends along the coast of California, however, such deposits have not been identified anywhere in the City of Alameda. The entire city, as well as neighboring areas in Oakland, San Leandro, and Emeryville, are classified Mineral Resource Zone (MRZ) category MRZ-1 by the California Department of Conservation’s Division of Mines and Geology (DMG). The MRZ-1 designation is assigned to areas where available information is adequate to determine that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.

**a,b) *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or 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?***

**No Impact.** The City of Alameda, including the project site, is classified as MRZ-1. No known mineral deposits are present within the project site or immediate project area. Project implementation would include upgrades to the existing AMS Ferry Terminal and would not result in a loss of availability of known or locally important mineral resources. There would be no impact and no mitigation would be required.

### 3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIII. NOISE</b> – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Environmental Setting

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. Sound is the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a human ear. Noise is defined as loud, unexpected, annoying, or unwanted sound. As sound travels through the atmosphere from the source to the receiver, noise levels attenuate (i.e., decrease) depending on a variety of factors, including geometric spreading (i.e., spherical or cylindrical spreading), ground absorption (i.e., hard versus soft sites), atmospheric conditions (e.g., wind direction and speed, air temperature, humidity, turbulence), and shielding by natural or human-made features.

The amplitude of pressure waves generated by a sound source determines the loudness of that source, also called the sound pressure level (SPL). SPL is most commonly described by using decibels (dB) because this logarithmic unit best corresponds to the way the human ear interprets sound pressures and allows for a more usable scaled numbering system. However, the decibel scale does not adequately characterize how humans perceive noise because the human ear is not equally sensitive to loudness at all frequencies (i.e., pitch) in the audible spectrum. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an “A-weighted” sound level (expressed in units of decibels A-weighted or dBA) can be computed based on this information. All sound levels discussed in this section are expressed in A-weighted decibels.

Because decibels are logarithmic units, SPLs expressed in dB cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In typical noisy

environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013a:2-10).

Various noise descriptors have been developed to describe time-varying noise levels and their perception. The noise descriptors used in this chapter include:

- Equivalent Continuous Sound Level (Leq): Leq represents an average of the sound energy occurring over a specified period. In effect, Leq is the steady-state sound level containing the same acoustical energy as the time varying sound level that occurs during the same period (Caltrans 2013a:2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly Leq, is the energy average of sound levels occurring during a 1-hour period; and
- Maximum Sound Level (Lmax): Lmax is the highest instantaneous sound level measured during a specified period (Caltrans 2013a:2-48; FTA 2018:207–208).

## Ground Vibration

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Groundborne vibration is vibration of and through the ground. Sources of groundborne vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions).

Groundborne vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV and RMS vibration velocity are normally described in inches per second (in/sec) but can also be expressed in decibel notation (VdB), which is used mainly in evaluating human response to vibration.

## Existing Sources of Noise and Sensitive Receptors

The predominant noise sources in the project area include vehicle traffic and industrial noises from adjacent shipyard and general Oakland Inner Harbor operations. This includes the Bay Ship & Yacht Company (a full-service ship repair company), which is located immediately to the east of the project site. Their property includes two floating drydocks, a Synchrolift, rails to dry-berth, and a propeller shop. Recreational uses to the south and west (the Main Street Dog Park and San Francisco Bay Trail), and residential uses further to the south of the project site generally do not generate much noise. The project site is located approximately 5.5 miles northwest of the Oakland International Airport, and approximately 2 miles outside of the 60 dBA CNEL noise level contour, and thus, does not substantially influence the noise environment at the project site.

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because of the potential for nighttime noise to result in sleep disruption. Vibration-sensitive land uses are generally considered to be buildings or structures that could be damaged due to vibration or land uses where vibration levels could interfere with operations or cause human annoyance.

As shown in Figure 2-2 in Section 2, Project Description, the project boundaries are limited to the existing AMS Ferry Terminal and parking lot. As described, sensitive receptors located close to various components of the project site include recreational facilities. The San Francisco Bay Trail runs immediately behind the terminal structure (approximately 60 feet from the gangway) and the Main Street Dog Park is approximately 260 feet from the float and 350 feet from the gangway. Further south and across the terminal parking lot and separated from the project site by Main Street (a two-way arterial street) are residential land uses. The edge of the nearest residence is located approximately 500 feet south of the project site. No residences are located immediately to the north, east, or west of the project site.

- a) ***Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

### Construction Noise

The project would involve refurbishment and upgrade of the existing terminal structures on the northernmost portion of the site, with the majority of work occurring in and immediately adjacent to the water. Installation of steel pipe piles for the new float, donut fenders, and bridge support are expected to use a vibratory hammer, with an impact hammer used only if needed. Installation of steel pipe piles can produce intense underwater noise that may lead to physical damage to swim bladders and/or other soft tissues, or cause alterations to swimming, sleeping, or foraging behaviors in fish and marine mammals.

To evaluate the potential project noise impacts related to pile installation in the water, a hydroacoustic assessment was conducted by Illingworth and Rodkin in 2022 (Appendix E). The analysis indicated that impact pile driving of the largest piles (48 in) could result in maximum underwater noise impacts exceeding the marine mammal thresholds extending out to about 997 meters for the Level A Injury zone for Pinnipeds while extending out to about 4,200 meters for the Level B Harassment zone. Impact pile driving of the largest (48 in) piles could result in acoustic impacts at distances extending out to 4,200 m and 1,010 m for the root-mean-square (RMS) (150 decibel [dB] re 1 micropascal [ $\mu$ Pa]) and Cumulative sound exposure level (SEL) (187 dB re  $1\mu$ Pa<sup>2</sup>-sec) respectively. Impacts to biological resources in the water during project construction activities are further discussed in Section 3.4, Biological Resources.

Landside and above-water noise generated construction would be limited to the operation of construction equipment and removal and replacement of the terminal bride/foundation, gangway, and float, as well as installation of a new potable water line at the terminal. Landside and above-water construction activities would be temporary in nature (intermittently over a 4-6 week period), and would involve vibration pile driving (unless impact pile driving is required). The majority of noise generated by construction activities would be similar in nature to other commercial/industrial activities that occur in the immediate vicinity. The most substantial noise sources would be caused by vibratory or impact pile driving (inclusive of noise from a crane, generator, or compressor), which would result in a noise level of approximately 68 dB at the nearest resident to the south based on Federal Highway Administration (FHWA) reference noise level data (FHWA 2006, FTA 2018).

As described in Section 2, Project Description, it is anticipated that project construction would occur Monday through Friday, 7:00 a.m. to 3:30 p.m., with the potential for Saturday work, which would be consistent with Section 4-10.7 of the Alameda Municipal Code. Section 4.10.5 restricts construction

activities between 7:00 a.m.-7:00 p.m. and Section 4.10-7 provides an exemption from the Alameda Municipal Code for construction if activities stay within this timeframe.

Equipment/personnel staging would occur within the terminal parking lot and emergency access and circulation (including bicycle/vehicular access) would be maintained at all times. No customer access to the terminal would be provided and ferry users would be routed to nearby terminals.

### Operational Noise

After construction is completed, the project would not appreciably increase the number of employees or visitors at the project site to operate the terminal. Operations at the project site would be similar to existing conditions, would not result in any new vehicle trips to and from the site, and thus there would be no measurable change in traffic noise levels. The types of operational, noise-generating equipment used at the project site would be similar to the types of equipment currently used. As such, no new stationary noise would be generated compared to existing conditions. Construction noise impacts would be less than significant.

### Summary

**Less-than-Significant Impact.** As described above, the project would not substantial temporary or permanent increase in ambient noise levels during construction or operation. Impacts would be less than significant and no mitigation is required.

**b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?***

**Less-than-Significant Impact.** As described in section a, installation of steel pipe piles for the new float and donut fenders, and bridge support, are expected to use a vibratory hammer, with an impact hammer used only if needed.

Potential impacts associated with use of the vibratory hammer could have an adverse impact on protected biological species in the project area that occur in the water. Potential noise impacts to biological resources resulting from use of the vibratory or impact hammer are discussed in Section 3.4, Biological Resources.

Groundborne vibration from various construction equipment have been documented and are presented in the Federal Transit Authority's Transit Noise and Vibration Impact Assessment Manual. The level of groundborne vibration generated by an impact pile driver have been shown to reach 1.518 in./sec. PPV, with typical vibration levels of 0.644 in./sec. PPV. Vibratory pile drivers have been shown to reach 0.734 in./sec. PPV with typical levels of 0.17 in./sec. PPV. The nearest sensitive residential structure are the houses south-southwest of the project (2860 Barbers Point Road), at an approximate distance of 545 feet from the nearest piles (24-in steel pipe piles to secure the landside of the terminal bridge). Propagating the upper level for impact pile driving to the residential structure, the level generated by the impact pile driving would be reduced to approximately 0.015 in./sec. PPV. Vibratory pile driving activities and the use of other construction equipment anticipated for use on the project would produce vibration levels far below that of the impact pile driver. Groundborne vibration associated with construction of the proposed project would be well below Caltrans' Guideline Vibration Damage Potential Threshold Criteria of

0.5 in./sec. PPV for older residential structures. Impacts would be less than significant, and no mitigation is required.

- c) ***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

No Impact. The project is not located within an airport land use plan or within two (2) miles of a public airport or public use airport. Additionally, the project is not located within two (2) miles of a private airstrip. As described above, the Oakland International Airport is located approximately 5.5 miles southeast of the project site. Further, the project would not include any new land uses where people would live or work. There would be no impact, and no mitigation is required.

### 3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIV. POPULATION AND HOUSING – Would the project:</b>				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Regulatory Framework

No plans, policies, regulations, or laws related to mineral resources are applicable to the project.

#### Environmental Setting

The City of Alameda’s population was estimated to be 77,784 in 2022. Total housing for 2022 included an estimated 75,677 units within the City with an average of 2.4 persons per household (DOF 2022). The project does not include or remove a residential development and would not provide any new permanent jobs.



- a) **Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

No Impact. The project does not include new homes or businesses that would induce or generate unplanned population growth. The construction and operation of the project would not remove an obstacle to growth through extension of roads and/or other infrastructure, indirectly inducing population growth. There would be no impacts and no mitigation is required.

- b) **Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

No Impact. The project site is developed with the existing AMS Ferry Terminal. The project would not displace existing homes or businesses and would not require the construction of replacement housing. There would be no impacts and no mitigation is required.

### 3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

**XV. PUBLIC SERVICES**

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

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Regulatory Framework

No plans, policies, regulations, or laws related to public services are applicable to the project.

#### Environmental Setting

Fire protection within the project area is provided by the City of Alameda Fire Department. Alameda Fire Station 2 is located approximately 1.3 miles south of the project site. City of Oakland Fire Station 2 is located approximately 0.9-mile northeast of the project site, across the Inner Harbor.

Police services within the project area are provided by the Alameda Police Department. The police department is located approximately 3.25 miles southeast of the project site. The Oakland Police Department is located approximately 1.2 miles northeast of the project site, across the Inner Harbor.

The project site is within the area of the Alameda Unified School District. The nearest school is Ruby Bridges Elementary School, which is approximately 0.75 mile southeast of the project site.

The nearest parks and/or other public facilities include the San Francisco Bay Trail, which runs along the Bay shoreline and between the terminal and the terminal parking lot, Main Street Dog Park, which is located directly adjacent to the project site to the west, as well as the Alameda Estuary Park, approximately 0.3 miles east of the project site. Other parks/public facilities within 0.75 mile of the project site include Bayport Park, Alameda Point Soccer Field, and Alameda Point Multipurpose Field.

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

***Fire protection?***

No Impact. Implementation of the project would not increase demand for fire protection services because the project would not generate new residents or businesses, which is generally the driving factor for increased or expanded fire protection services. During construction, emergency access would be maintained along roadways for emergency vehicles and services. Because the project would not increase demand for fire protection services, the construction of new or expansion of existing fire service facilities would not be required. There would be no impacts and no mitigation is required.

***Police protection?***

No Impact. Implementation of the project would not increase demand for police protection services because the project would not generate new residents or businesses. During construction, emergency access would be maintained along roadways for emergency vehicles and services. Because the project would not increase demand for police protection services, the construction of new or expansion of existing police service facilities would not be required. There would be no impacts and no mitigation is required.

***Schools?***

No Impact. The project would not provide any new housing that would generate new students in the community nor result in an increase in employment opportunities that could indirectly contribute new students to the Alameda Unified School District. There would be no impacts and no mitigation is required.

***Parks?***

No Impact. Impacts to parks are typically associated with population growth and/or alteration or removal of existing park spaces. The project would not alter or remove any parks or recreational facilities, would not result in additional housing, and would not generate new residents. There would be no impacts and no mitigation is required.

**Other public facilities?**

No Impact. As previously described, the project would involve upgrades and modifications to the AMS Ferry Terminal. No residences or businesses would be removed or added to the local population, and operation of the upgraded terminal would not impact demand for public facilities in Alameda. There would be no impacts and no mitigation is required.

### 3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVI. RECREATION</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Regulatory Framework

No plans, policies, regulations, or laws related to recreation are applicable to the project.

#### Environmental Setting

As described in Section 3.15, “Public Services,” the nearest parks and other public facilities to the project site include the San Francisco Bay Trail and Main Street Dog Park, which are located directly adjacent to the project site, as well as the Alameda Estuary Park, approximately 0.3 miles east of the site. Other parks/public facilities within 0.75 mile of the project site include Bayport Park, Alameda Point Soccer Field, and Alameda Point Multipurpose Field.

**a,b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?**

No Impact. Implementation of the project includes upgrades to the existing AMS Ferry Terminal. The project would not alter or remove any parks or other recreational facilities, nor would it alter the short- or long-term use of parks or recreation facilities. Additionally, the project would not generate increased

population or additional housing such that increased use of parks and recreational facilities necessitate new or expanded parks or recreation facilities. There would be no impacts and no mitigation is required.

### 3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVII. TRANSPORTATION – Would the project:</b>				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Environmental Setting

As described in Section 2, Project Description, regional access to the City of Alameda is provided by a variety of transportation modes. Interstate 880 (I-880) through Oakland—the nearest freeway to the project site—provides regional access for automobiles and transit. Regional traffic accesses the project site via State Route 61 (SR 61) through the Webster-Posey Tubes, the Park Street Bridge, the Miller Sweeney Bridge, and the High Street Bridge connecting the island of Alameda and the City of Oakland. The project site is accessed by Main Street, a two (2)-lane arterial road that includes intermittent bike lanes.

The San Francisco Bay Trail, which traverses the project site through the terminal facility provides 350 miles of trails that surround the Bay and welcomes hikers, joggers, bicyclists, skaters and wheelchair users. No sidewalks or other pedestrian facilities are located at the project site.

Public transit in the project area includes the Alameda-Contra Costa Transit District (AC Transit), which is the primary bus service provider in Alameda. The nearest AC Transit bus stop from the project site is approximately 0.3 miles south, on West Midway Avenue. The Alameda Main Street Ferry also serves the project area for public transportation via ferry to Downtown San Francisco.

- a) ***Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?***

*Less-than-Significant Impact.* The project would not conflict with the Mobility Element of the City of Alameda General Plan 2040 (Goals 1-5). The project area is predominantly automobile-oriented and the

project would not impact other modes of transportation. Temporary construction activities would result in a temporary albeit negligible increase in vehicle trips to the project site during construction by workers and equipment. Roadways leading to and from the project site would remain open during construction, however, the parking lot would remain temporarily closed during the 1-month duration of construction activities. Users of the San Francisco Bay Trail could be temporarily rerouted around the active construction site, however, access to the trail would remain open at all times. Once project construction is complete, the AMS Ferry Terminal parking lot would be restored to their pre-project conditions. Impacts would be less than significant, and no mitigation is required.

**b) *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?***

**Less-than-Significant Impact.** Temporary construction activities would result in a temporary increase in vehicle trips to the project site during construction by workers and equipment. However, the project would not alter existing land uses, would not generate new residents or businesses, and once operational, would not appreciably alter the vehicle miles traveled. Impacts would be less than significant, and no mitigation would be required.

**c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

**Less-than-Significant Impact.** Temporary construction activities could result in temporary detours in the project area. However, this condition would be temporary in nature and traffic in the area is not anticipated as ferry users would be routed to nearby terminals. Hazards due to a geometric design feature or incompatible use are not anticipated. Traffic/circulation at the AMS Ferry Terminal is planned to be restored to the pre-project condition upon completion of construction. Impacts would be less than significant, and no mitigation is required.

**d) *Would the project result in inadequate emergency access?***

**Less-than-Significant Impact.** Similar to item c, temporary construction activities could result in temporary detours in the project area. However, this condition would be temporary in nature and traffic in the area is not anticipated as ferry users would be routed to nearby terminals. Emergency access would still be provided. Traffic/circulation at the AMS Ferry Terminal is planned to be restored to the pre-project condition upon completion of construction. Impacts would be less than significant, and no mitigation would be required.

### 3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVIII. TRIBAL CULTURAL RESOURCES</b>				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) 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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Environmental Setting

Assembly Bill (AB) 52, signed by Governor Edmund G. Brown, Jr., in September 2014, established a new class of resources under CEQA: “tribal cultural resources.” AB 52, as provided in Public Resource Code Sections 21080.3.1, 21080.3.2, and 21082.3, requires that lead agencies undertaking CEQA review must, upon written request of a California Native American Tribe, begin consultation once the lead agency determines that the application for the project is complete, prior to the issuance of a Notice of Preparation of an EIR or notice of intent to adopt a negative declaration or mitigated negative declaration.

The Native American Heritage Commission (NAHC) was contacted to request a Sacred Lands File search for known cultural resources within or near the project site. The results of the search returned by the NAHC on July 29, 2022 were positive for Native American cultural resources in the project vicinity. The NAHC provided contact information for tribal members and organizations affiliated with the region and recommended that they be contacted for more information on the potential for Native American cultural resources within or near the project area. The following tribes were contacted for consultation under AB 52:

- The Ohlone Indian Tribe
- Indian Canyon Mutsun Band of Costanoan
- Amah Mutsun Tribal Band of Mission San Juan Bautista

- Trina Marine Ruano Family
- Amah/Mutsun Tribal Band
- Muwekma Ohlone Indian Tribe of the SF Bay Area
- North Valley Yokuts Tribe
- Costanoan Rumsen Carmel Tribe
- Wuksache Indian Tribe/Eshom Valley Band
- The Confederated Villages of Lisjan Nation

The Confederated Villages of Lisjan Nation responded on August 18, 2022, requesting a copy of the NAHC response. WETA provided the Confederated Villages of Lisjan Nation with the NAHC response letter on August 25, 2022. Since August 25th, no further coordination has occurred.

- a, b) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? Or 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

**Less-than-Significant Impact with Mitigation Incorporated.** Project construction activities would involve ground disturbance associated with new and replacement terminal structures, including the terminal bridge, bridge foundation, gangway, and terminal float. As described above, though no formal AB52 consultation was initiated with any of the tribes contacted on August 4, 2022, the NAHC response received on July 29, 2022, was positive for Native American cultural resources in the project vicinity. Therefore, the potential to encounter tribal cultural resources within the project area exists. Any adverse change to a tribal cultural resource resulting from project construction activities would be potentially significant.

### **Mitigation Measure 3.18-1: Tribal Cultural Resources Unanticipated Discovery**

If any suspected tribal cultural resources are discovered during ground disturbing construction activities, including midden soil, stone tools, chipped stone, or unusual amounts of baked clay, shell, or bone, all grading and excavation work shall cease within 100 feet of the find and the following procedures shall take place:

- WETA shall retain a qualified archaeologist and immediately notify and retain a tribal representative from a California Native American tribe that is traditionally and culturally affiliated with the geographic area. Together, the archaeologist and tribal representative shall determine if the find is a tribal cultural resource (pursuant to PRC Section 21074). If the find does not qualify as a tribal cultural resource, work may resume.
- If the find is determined to be a tribal cultural resource, the tribal representative shall make recommendations for the appropriate treatment, as necessary. Preservation in place is the



preferred alternative under CEQA and tribal protocols, and every effort must be made to preserve the resources in place, including through project redesign.

- Culturally appropriate treatment may include, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project vicinity where they will not be subject to future impacts. Materials shall not be permanently curated unless approved by the tribe. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include culturally appropriate recovery of cultural objects and reburial of cultural objects or cultural soil. WETA shall work with the contractor and tribal representative to facilitate the appropriate tribal treatment of any finds, as necessary.
- Work at the discovery location cannot resume until all necessary investigation and evaluation of the discovery, has been completed.

Therefore, with implementation of Mitigation Measure 3.18-1, potential project impacts related to tribal cultural resources would be addressed by implementation of a cultural resources respect training program and, in the case of a discovery, preservation in place and/or culturally appropriate treatment as directed by a tribal representative if significant artifacts are recovered. No further mitigation would be required.

### 3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:</b>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Regulatory Framework

No plans, policies, regulations, or laws related to utilities and service systems are applicable to the project.

### Environmental Setting

East Bay Municipal Utility District (EBMUD) supplies water and provides wastewater treatment for a large part of Alameda and Contra Costa counties. Approximately 1.4 million people are currently served by EBMUD’s water system in a 332-square-mile area. The wastewater system serves approximately 740,000 people in an 88- square- mile area of Alameda and Contra Costa counties along the Bay’s east shore, extending from the City of Richmond in the north, southward to the City of San Leandro. EBMUD water customers include residential, industrial, commercial, institutional, and irrigation water users.

The EBMUD water supply system collects, transmits, treats, and distributes high-quality water from its primary water source, the Mokelumne River, to its customers in the San Francisco East Bay Area. EBMUD has six water treatment plants (WTPs) located in the EBMUD service area. The average annual water demand for 2020 was 238 million gallons per day (mgd). EBMUD forecasts a future demand of 297 mgd by 2050.

EBMUD’s wastewater service district provides wastewater treatment for approximately half of the population within the EBMUD water service area. The remainder of EBMUD’s water service area receives wastewater treatment from various other agencies and municipalities. EBMUD’s wastewater service district serves approximately 740,000 people in an 88 square-mile area of Alameda and Contra Costa counties along the east shore of the San Francisco Bay. The project site is located within EBMUD Special District No.1 (SD-1). Wastewater collected in SD-1 is treated at EBMUD’s Main Wastewater Treatment Plant (MWWTP), which is located in Oakland near the foot of the Bay Bridge. The MWWTP provides secondary treatment for a maximum flow of 168 mgd. Primary treatment can be provided for up to 320 mgd. The average dry weather flow from 2010 to 2019 was approximately 54 mgd (EBMUD 2021).

Commercial and residential solid waste generated in the City of Alameda is collected by Alameda County Industries (ACI). Garbage collected throughout Alameda is hauled to the Davis Street Transfer Station in San Leandro, where it is loaded into higher-capacity trailer trucks and hauled to Altamont Landfill in eastern Alameda County. Recyclable materials, which are collected from residential and commercial customers in separate bins, are hauled to ACI’s

Aladdin Materials Recovery Facility (MRF) and Transfer Facility in the City of San Leandro, which sorts, separates, and bundles the recyclables for sale to secondary markets (Alameda 2021a). The Altamont Landfill has permitted maximum daily throughput of 11,150 tons and a maximum remaining capacity of 65,400,000 cubic yards through 2070 (CalRecycle 2022).

Electric service in the City of Alameda is provided by AMP, which was founded in 1887 and is the oldest municipal electric utility in California. AMP owns local distribution lines and has joint ownership of generation and transmission resources with other municipally-owned utility members of the Northern California Power Agency (NCPA), a joint powers agency (Alameda 2021a).

Natural gas service is provided in Alameda by Pacific Gas & Electric Company (PG&E) (Alameda 2021a).

- a) ***Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

*Less-than-Significant Impact.* As described in Chapter 2, “Project Description,” the project would include utility upgrades involving replacement of existing razor equipment, installation of electrical service for new ramp controls, and outlets, provision of conduit for future upgrades, as well as potable water infrastructure. Potable water infrastructure would involve connections to existing water supply lines to be used for periodic cleaning of the terminal. Utility connections for potable water and electricity would occur within existing infrastructure within the project site. No additional new or expanded infrastructure would be required such that significant environmental effects would occur. Impacts would be less than significant and no mitigation is required.

- b) ***Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?***

*Less-than-Significant Impact.* The project consists of upgrades and replacements to the existing AMS Ferry Terminal structure and would involve potable water connections at the site. Potable water at the site would be used for periodic cleaning of the terminal. The projects demand for potable water would be negligible and EBMUD would have available water supply to serve project implementation. Impacts would be less than significant and no mitigation is required.

- c) ***Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?***

*Less-than-Significant impact.* The project does not currently generate substantial wastewater. Project activities would involve refurbishment and upgrades to the existing AMF Ferry Terminal structures. As described above, the project would include potable water connections for periodic cleaning of the terminal. Water demand generated at the site would be negligible and therefore, wastewater resulting from water consumption would also be negligible. Impacts would be less than significant and no mitigation is required.

d, e) **Would the project 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? Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Less-than-Significant Impact. Debris generated during construction and site clearing activities would consist of the existing steel float, steel guide piles, gangway, bridge structure, bridge structure steel support system (H-Pile and steel beams), concrete approach slab, and miscellaneous electrical/mechanical conduit attached to the existing elements to be removed. The project is estimated to generate a total of 164.3 cubic yards of debris during construction (refer to Appendix E). In accordance with Section 5.408 of the CALGreen Code, the project would implement a Construction Waste Management Plan for recycling and/or salvaging for reuse of a minimum of 65 percent of nonhazardous construction and demolition debris generated during project construction. As described above, solid waste would be disposed of at the Altamont Landfill, which has a remaining capacity of 65,400,000 cubic yards through 2070. Waste generated during construction would represent less than 0.00002 percent of the landfill's remaining capacity. Once operational, the project would not directly or substantially generate any new waste (incidental waste from ferry patrons is currently collected and would continue when operations resume). As such, there is adequate capacity at existing landfills for disposal of solid waste generated by project construction. Additionally, the project would comply with applicable State and local requirements including those pertaining to solid waste, construction waste diversion, and recycling. Impacts would be less than significant, and no mitigation is required.

### 3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XX. WILDFIRE</b> – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Framework

No plans, policies, regulations, or laws related to wildfire are applicable to the project.

### Environmental Setting

The City of Alameda, which includes the project site, is within a Local Responsibility Area (LRA) and is designated as a non-very high fire hazard severity zone (VHFHSZ). The entire City is an urbanized area and there are no wildlands in close proximity to the site (CALFIRE 2022; City of Alameda 2021a).

As described in Section 3.9, “Hazardous Materials,” The Alameda County EOP establishes the foundational policies and procedures that define how Alameda County will effectively prepare for, respond to, recover from, and mitigate against natural or human-caused disasters. As discussed in Section 3.15, “Public Services,” fire protection within the project area is provided by the City of Alameda Fire Department.

**a) *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

**No Impact.** Construction and operation of the project would not impede vehicular travel along local roadways, such that emergency response or evacuation would be impaired within the project area. During construction, the terminal would be closed and no access to the site would be provided, however, emergency access would be maintained at all times. There would be no impacts and no mitigation would be required.

**b) *Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

**No Impact.** The project would not exacerbate wildfire risks as the project site is not located within a very-high fire hazard severity area within a State Responsibility Area. The project site is substantially surrounded by developed land and the Oakland Inner Harbor and is not located near wildland areas that would be susceptible to wildfire. There would be no impact and no mitigation would be required.

**c) *Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

**No Impact.** As described in Section 3.9, “Hazards and Hazardous Materials,” the project is located in an urbanized area of the City of Alameda that is not adjacent to any sensitive fire hazard severity zones. Project

activities would involve replacement and upgrades of existing structures in an area that is surrounded by development and the Oakland Inner Harbor. Thus, project activities would not exacerbate fire risks within the project area. There would be no impact and no mitigation would be required.

**d) *Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

**No Impact.** The project is in an area of flat terrain on landside and the Oakland Inner Harbor. Project activities would not involve changes to landside slopes that could expose people to risks of flooding from post-fire slope instability. Further, the project site and surrounding areas have not been subject to recent wildfire burns such that downslope areas would be affected by project implementation. As described in Section 3.10, “Hydrology and Water Quality,” the project would include implementation of CALGreen BMPs related siltation and erosion. Further, the project would not result in any increase in runoff such that flooding would occur. There would be no impact and no mitigation would be required.

### 3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XXI. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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

Less-than-Significant Impact with Mitigation Incorporated. Implementation of Mitigation Measure 3.4-1, 3.4-2, and 3.4-3, identified in Section 3.4, “Biological Resources,” of this Initial Study would ensure that the project would not substantially affect fish or wildlife species during construction with regard to underwater noise, would not result in the spread of invasive marine species, and would not result in adverse effects on jurisdictional wetlands and/or water. Implementation of Mitigation Measure 3.5-1 and 3.18-1, identified in Sections 3.5, “Cultural Resources,” and 3.18, “Tribal Cultural Resources,” respectively, would prevent the project from significantly affecting previously undiscovered archaeological and/or tribal cultural resources.

Therefore, with implementation of Mitigation Measures 3.4-1 through 3.4-4, 3.5-1, and 3.18-1, the project’s potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory, would be less than significant.

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

Less-than-Significant Impact with Mitigation Incorporated. As presented throughout this environmental checklist, the project would result in less-than-significant impacts or impacts that are mitigated to less-than-significant levels. Potential impacts related to construction air quality emissions would be avoided through implementation of Mitigation Measure 3.3-1. The potential affect fish and wildlife species, sensitive communities, and jurisdictional wetlands shall be avoided through Mitigation Measures 3.4-1, 3.4-2, and 3.4-3. The potential for unknown archaeological materials or tribal cultural resources to be disturbed is addressed through implementation of Mitigation Measures 3.5-1 and 3.18-1. Finally, underwater noise impacts, would be appropriately addressed through implementation of Mitigation Measure 3.4-1. Therefore, the project would not result in significant construction or operational environmental impacts, and the project would not contribute to significant cumulative impacts. Impacts would be less than significant.

- c) ***Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?***

Less-than-Significant Impact with Mitigation Incorporated. Potential adverse effects to human beings would occur due to project-related construction impacts related to criteria air pollutant emissions and underwater noise. However, through implementation of Mitigation Measure 3.3-1, project-related air emissions would not be in excess of the BAAQMD thresholds for, NO<sub>x</sub>, which are tied to achieving or maintaining attainment designations with the NAAQS and CAAQS, which are scientifically substantiated,



numerical concentrations of criteria air pollutants considered to be protective of human health. Potential underwater noise generated during project construction would be reduced to less-than-significant levels by implementation of Mitigation Measure 3.4-1, as previously discussed. Therefore, with implementation of Mitigation Measures 3.3-1 and 3.4-1, the project's potential adverse effect on human beings, either directly or indirectly, would be less than significant.

---

# 4 References and Preparers

## 4.1 References Cited

- BAAQMD (Bay Area Air Quality Management District). 2009. *Revised Draft Options and Justification Report - California Environmental Quality Act Thresholds of Significance*. October 2009. <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en>
- BAAQMD. 2017a. *California Environmental Quality Act Air Quality Guidelines*. Updated May 2017. [http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa\\_guidelines\\_may2017-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en).
- BAAQMD. 2017b. *Spare the Air: Cool the Climate - Final 2017 Clean Air Plan*. April 19, 2017. Accessed May 2019. [http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a\\_proposed-final-cap-vol-1-pdf.pdf?la=en](http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_proposed-final-cap-vol-1-pdf.pdf?la=en).
- BAAQMD. 2022. *CEQA Thresholds for Evaluating the Significance of Climate Impacts From Land Use Projects and Plans*. April 2022. <https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-thresholds-2022/justification-report-pdf.pdf?la=en>
- CAPCOA (California Air Pollution Control Officers Association). 2008. *CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*. January 2008.
- CARB (California Air Resources Board). 2008. *Climate Change Scoping Plan: A Framework for Change*. December 2008. Accessed May 2019. [https://www.arb.ca.gov/cc/scopingplan/document/adopted\\_scoping\\_plan.pdf](https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf).
- CARB. 2014. *First Update to the Climate Change Scoping Plan Building on the Framework Pursuant to AB 32 – The California Global Warming Solutions Act of 2006*. May 2014. Accessed May 2019. [http://www.arb.ca.gov/cc/scopingplan/2013\\_update/first\\_update\\_climate\\_change\\_scoping\\_plan.pdf](http://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf).
- CARB. 2017. *California’s 2017 Climate Change Scoping Plan*. November 2017. Accessed May 2019. [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).
- CARB. 2020. “Facts About the Advanced Clean Cars Program.” Accessed April 2022. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about>.
- CARB. 2021a. *Advanced Clean Cars Program*. Accessed December 2021 at <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about>.
- CARB. 2021b. *Advanced Clean Trucks Fact Sheet*. August 20, 2021. Accessed at: [https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet\\_ADA.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet_ADA.pdf)

CARB. 2022. Draft 2022 Scoping Plan Update. May 10, 2022. Accessed June 2022 at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>.

City of Alameda. 2019. Alameda Climate Action and Resiliency Plan. September 2019. Accessed at [https://www.alamedaca.gov/files/sharedassets/public/public-works/climate-action-page/new-folder/final-carp-9-2019/alameda\\_carp\\_final\\_091119noappendices.pdf](https://www.alamedaca.gov/files/sharedassets/public/public-works/climate-action-page/new-folder/final-carp-9-2019/alameda_carp_final_091119noappendices.pdf)

CNRA (California Natural Resources Agency). 2009. *Final Statement of Reasons for Regulatory Action: Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97*. December 2009.

EIA (U.S. Energy Information Administration). 2019. "California State Profile and Energy Estimates – Table F16: Total Petroleum Consumption Estimates, 2017." Accessed May 2019. [https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep\\_fuel/html/fuel\\_use\\_pa.html&sid=US&sid=CA](https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA).

IPCC (Intergovernmental Panel on Climate Change). 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, 996 pp. Accessed May 2019. [http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4\\_wg1\\_full\\_report.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4_wg1_full_report.pdf).

The Climate Registry. 2021. 2021 Default Emission Factors. Accessed October 2021. <https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf>.

## 4.2 List of Preparers

### San Francisco Water Emergency Transportation Authority

Chad Mason, Senior Planner/Project Manager  
Gabriel Chan, Planner

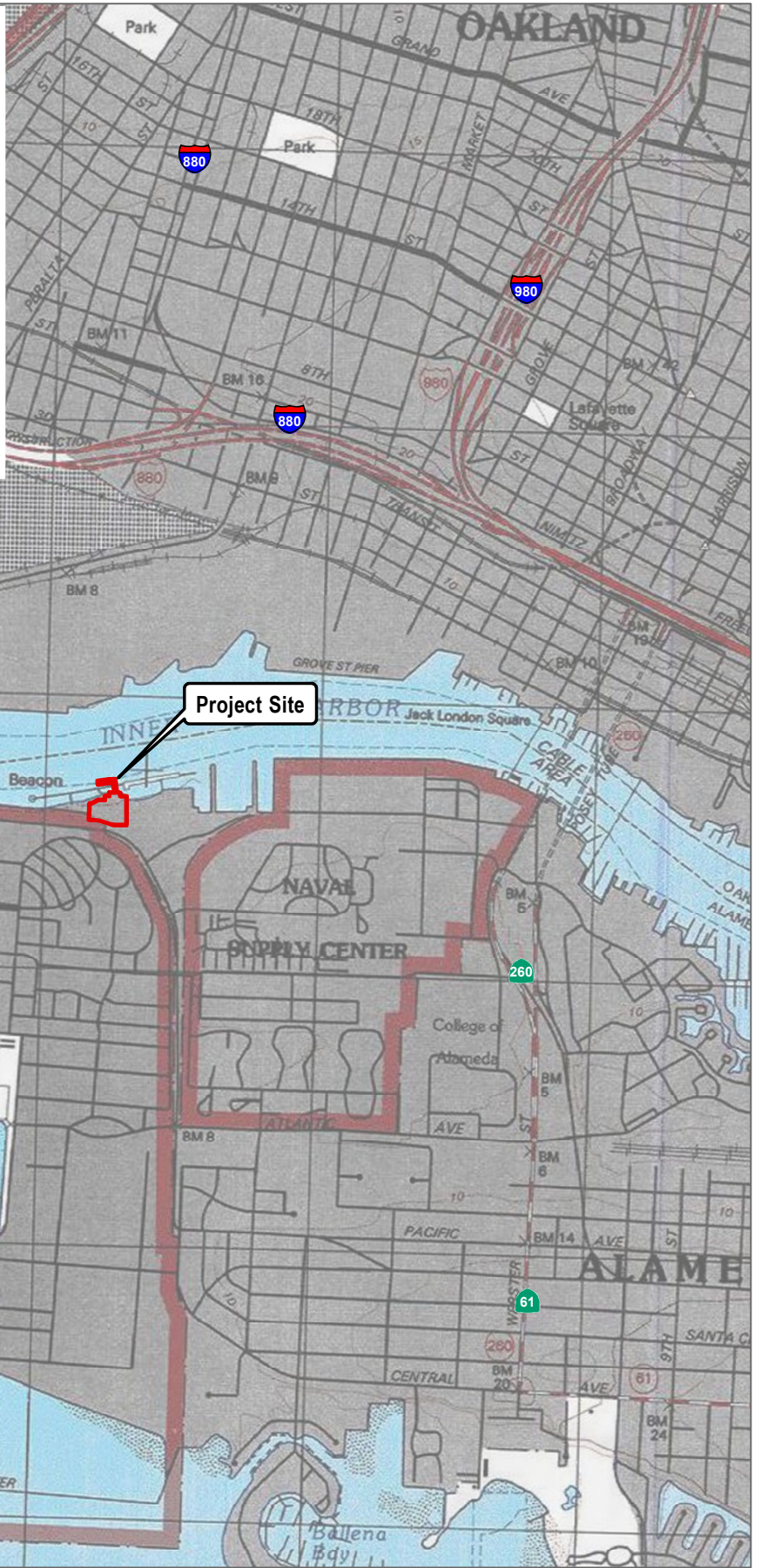
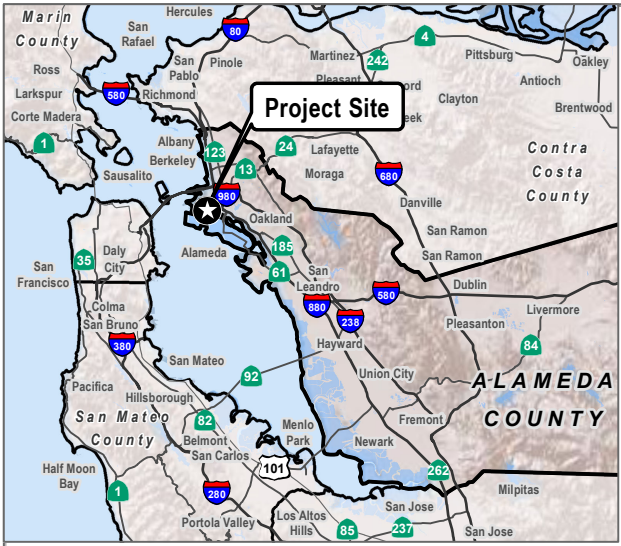
### Dudek (CEQA Compliance)


Christine Fukasawa, CEQA Project Manager  
Kirsten Burrowes, CEQA Deputy Project Manager  
David Wickens, Permitting Specialist  
Matthew Morales, Air Quality Specialist  
Adam Poll, Air Quality Specialist  
Andrew Hatch, Biologist  
Michael Carr, Acoustician

### Illingworth and Rodkin (Hydroacoustic Assessment)

James Reyff, Project Scientist  
Adwait Ambaskar, Project Consultant





 Project Boundary

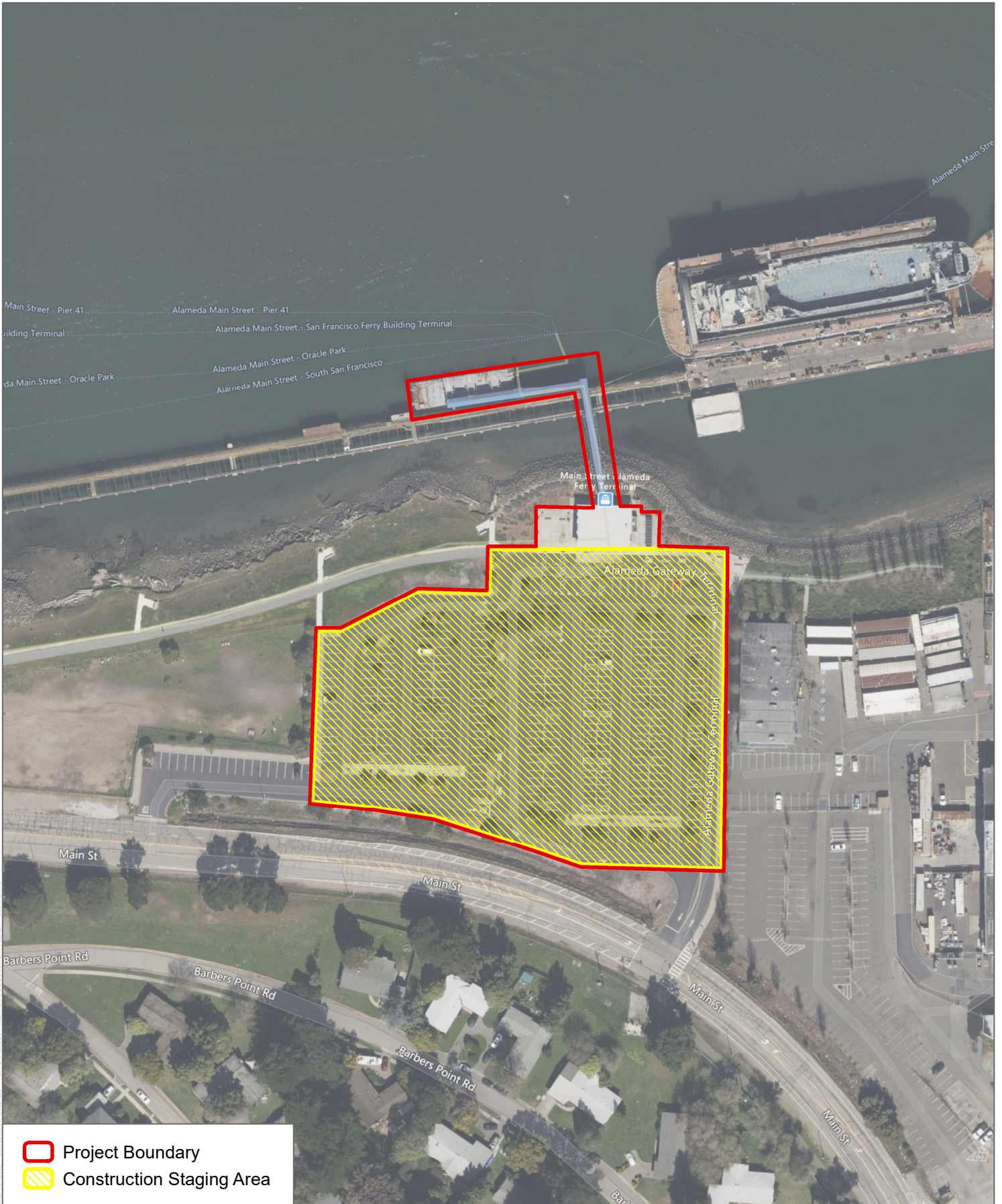
SOURCE: USGS 7.5-minute Series Oakland West Quadrangle



**FIGURE 1**  
Project Location  
Alameda Main Street Terminal Refurbishment Project

INTENTIONALLY LEFT BLANK





SOURCE: Bing Maps 2021

**FIGURE 2**  
**Project Site**  
 Alameda Main Street Terminal Refurbishment Project

INTENTIONALLY LEFT BLANK