# 3600 ALAMEDA AVENUE PROJECT

## Draft Environmental Impact Report

Prepared for
City of Oakland

July 2023

ESA

# 3600 ALAMEDA AVENUE PROJECT

## Draft Environmental Impact Report

Prepared for
City of Oakland

July 2023

180 Grand Avenue
Suite 1050
Oakland, CA 94612
510.839.5066
esassoc.com

ESA

| | | |
|---|---|---|
| Atlanta | Palm Beach County | San Diego |
| Bend | Pasadena | San Francisco |
| Irvine | Pensacola | San Jose |
| Los Angeles | Petaluma | Sarasota |
| Mobile | Portland | Seattle |
| Oakland | Rancho Cucamonga | Tampa |
| Orlando | Sacramento | Thousand Oaks |

D202100922

**OUR COMMITMENT TO SUSTAINABILITY** | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

# CONTENTS

## 3600 Alameda Avenue Project
## Draft Environmental Impact Report


Page

**Chapter 1, Introduction ..... 1-1**
1.1 Project Overview ..... 1-1
1.2 Environmental Review Process ..... 1-2
1.3 Organization of this Draft EIR ..... 1-4

**Chapter 2, Summary ..... 2-1**
2.1 Introduction ..... 2-1
2.2 Project Location ..... 2-1
2.3 Project Description ..... 2-2
2.4 Impacts of the Project ..... 2-3
2.5 Alternatives to the Project ..... 2-3
2.6 Comments on Notice of Preparation ..... 2-4
2.7 Areas of Controversy ..... 2-4
2.8 Issues to Be Resolved ..... 2-4

**Chapter 3, Project Description ..... 3-1**
3.1 Project Location ..... 3-1
3.2 Existing Site Conditions ..... 3-1
3.3 Project Characteristics ..... 3-3
3.4 Project Objectives ..... 3-10
3.5 Project Variant ..... 3-10
3.6 Discretionary Actions and Other Planning Considerations ..... 3-11

**Chapter 4, Environmental Setting, Impacts, and Standard Conditions of Approval ..... 4.0-1**
4.0 Introduction to the Environmental Analysis ..... 4.0-1
4.1 Air Quality ..... 4.1-1
4.2 Biological Resources ..... 4.2-1
4.3 Greenhouse Gas Emissions ..... 4.3-1
4.4 Hazards and Hazardous Materials ..... 4.4-1
4.5 Noise and Vibration ..... 4.5-1
4.6 Transportation and Circulation ..... 4.6-1
4.7 Effects Not Found to Be Significant ..... 4.7-1

**Chapter 5, Project Variant ..... 5-1**
5.1 East 7th Street Extension ..... 5-1
5.2 Impacts of the East 7th Street Extension Project Variant ..... 5-3
5.3 Summary ..... 5-7

Page

**Chapter 6, Alternatives....6-1**
6.1 CEQA Requirements ....6-1
6.2 Factors in the Selection of Alternatives ....6-2
6.3 Alternatives Considered but Rejected for Further Evaluation ....6-4
6.4 Selected Alternatives Selected and Comparative Analysis....6-4
6.5 Overall Comparison of Proposed Project with Alternatives....6-8

**Chapter 7, Other Statutory Sections ....7-1**
7.1 Significant Environmental Effects ....7-1
7.2 Significant Irreversible Environmental Changes....7-1
7.3 Growth-Inducing Impacts ....7-2
7.4 Cumulative Impacts....7-5
7.5 Effects Not Found to Be Significant ....7-5
7.6 References – Other Statutory Sections ....7-6

**Chapter 8, Report Preparers....8-1**
8.1 Lead Agency ....8-1
8.2 EIR Consultants ....8-1

## Appendices

A. Notice of Preparation, Scoping Meeting Materials, and Scoping Comments
B. Cumulative Projects List and Map
C. Air Quality and Health Risk Assessment Information
D. 3600 Alameda Tree Survey
E. Plant and Wildlife Species Lists for the Project Area; CNDDB Database Report
F. Equitable Climate Action Plan Consistency Checklist
G Greenhouse Gas Reduction Plan
H. 3600 Alameda Project Noise Measurements
I. Construction Noise Management Plan
J. Transportation Impact Review Memorandum
K. Transportation and Parking Demand Management Plan
L. Peer Review of Historic Resource Evaluation and Supporting Information
M. Energy Calculations

## Figures

Figure 3-1 Project Location ....3-2
Figure 3-2 Project Site Plan ....3-4
Figure 3-3 Project Elevations ....3-6
Figure 3-4 Project Elevations ....3-7
Figure 4.4-1 Existing Building Designations .... 4.4-4
Figure 4.5-1 Effects of Noise on People .... 4.5-2
Figure 4.5-2 Noise Monitoring Locations .... 4.5-7
Figure 4.6-1 Existing Transit Service .... 4.6-4
Figure 4.6-2 Existing and Planned Bicycle Network .... 4.6-7
Figure 4.6-3 Project Truck Routes .... 4.6-38
Figure 5-1 Project Variant ....5-2

Page

## Tables


Table 2-1 Summary of Impacts, Standard Conditions of Approval, Mitigation Measures, and Residual Impacts ..... 2-6
Table 4.1-1 Highest Measured Air Pollutant Concentrations at the International Boulevard Monitoring Station (2016–2020) ..... 4.1-6
Table 4.1-2 State and National Ambient Air Quality Standards and the San Francisco Bay Area Air Basin's Attainment Status ..... 4.1-9
Table 4.1-3 Project Average Daily Construction Emissions ..... 4.1-32
Table 4.1-4 Project Average Daily and Annual Operational Emissions ..... 4.1-33
Table 4.1-5 Project Construction Health Risks ..... 4.1-35
Table 4.1-6 Project Operational Health Risks ..... 4.1-36
Table 4.1-7 Project Consistency with Potentially Applicable 2017 Clean Air Plan Control Measures ..... 4.1-39
Table 4.1-8 Cumulative Health Impacts to Off-Site MEIR ..... 4.1-44
Table 4.2-1 Special-Status Species' Potential to Occur within the Study Area ..... 4.2-4
Table 4.3-1 Project GHG Emissions From Construction ..... 4.3-17
Table 4.3-2 Total Project GHG Emissions ..... 4.3-17
Table 4.3-3 GHGRP Measures ..... 4.3-20
Table 4.4-1 Federal Laws and Regulations Related to Hazardous Materials Management ..... 4.4-8
Table 4.4-2 State Laws and Regulations Related to Hazardous Materials Management ..... 4.4-9
Table 4.5-1 Noise Measurement Data Collected in the Vicinity of the Project Site ..... 4.5-6
Table 4.5-2 Construction Vibration Damage Criteria ..... 4.5-9
Table 4.5-3 Community Noise Exposure (DNL or CNEL) ..... 4.5-11
Table 4.5-4 Land Use Noise Compatibility Guidelines – City of Oakland ..... 4.5-12
Table 4.5-5 Maximum Allowable Receiving Noise Standards for Specified Land Uses, dBA (from stationary sources) ..... 4.5-15
Table 4.5-6 Maximum Allowable Receiving Noise Standards for Temporary Construction or Demolition Activities, dBA ..... 4.5-15
Table 4.5-7 Acceptable Noise Levels in Alameda ..... 4.5-17
Table 4.5-8 City of Alameda Exterior Noise Standards ..... 4.5-18
Table 4.5-9 Typical Maximum Noise Levels from Construction Equipment ..... 4.5-25
Table 4.5-10 Peak-Hour Traffic Noise Levels (dBA) Near the Project Site ..... 4.5-28
Table 4.5-11 Peak-Hour Cumulative Traffic Noise Levels (dBA) Near the Project ..... 4.5-30
Table 4.6-1 AC Transit Lines near the Project Site ..... 4.6-3
Table 4.6-2 At-Grade Railroad Crossing Inventory ..... 4.6-9
Table 4.6-3 Project Vehicle Trip Generation Summary ..... 4.6-29
Table 4.6-4 Trip Generation by Travel Mode ..... 4.6-30
Table 4.6-5 Project VMT Screening Summary ..... 4.6-34
Table 4.6-6 Project VMT Analysis Summary ..... 4.6-35
Table 4.7.5-1 Project Energy Consumption during Construction ..... 4.7-39
Table 4.7.5-2 Project Annual Energy Consumption during Operation ..... 4.7-41
Table 5-1 Peak-Hour Traffic Noise Levels (dBA) Near the Project Site ..... 5-5
Table 6-1 Project Impacts Identified in Chapter 4 ..... 6-3
Table 6-2 Description of Project and Alternatives Selected for Evaluation ..... 6-5
Table 6-3 Project Alternatives Impact Summary and Comparison ..... 6-10

This page intentionally left blank

# CHAPTER 1
# Introduction

This Draft Environmental Impact Report (Draft EIR) has been prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines to analyze potential physical environmental impacts of the proposed 3600 Alameda Avenue Project (Project).[1] This chapter provides and overview of the Project and the environmental review process, a description of the purpose of this Draft EIR and opportunities for public comment, and an explanation of how this Draft EIR is organized.

## 1.1 Project Overview

The Project would redevelop an approximately 23.9-acre site located at 3600 Alameda Avenue in Oakland, California, and would include construction of an approximately 430,000-square-foot, Class A, LEED Silver industrial facility.[2] The facility would be able to accommodate a variety of uses that may consist of manufacturing, research and development, warehousing, or industrial operations. However, for the purposes of the conservative analyses presented in Chapter 4, the end use is assumed to be a distribution warehouse.

The Project would create a new connection of 37th Avenue with Alameda Avenue, and a realignment of Alameda Avenue. Sidewalks surrounding the Project site would be re-constructed, and the Alameda Avenue realignment would result in widened sidewalks, a new bike path, and enhanced public access to the shoreline and San Francisco Bay Trail (Bay Trail).

The new distribution warehouse facility would include up to 30,000 square feet of accessory office space, and an approximately 10,000 square-foot café/restaurant. The Project would include an employee parking lot, a truck parking lot with 48 loading dock doors, in addition to extensive landscaped buffers and amenity space surrounding the Project site.

---

1 The *California Environmental Quality Act* can be found in the California Public Resources Code, Section 21000 et seq. The State CEQA Guidelines, formally known as the *Guidelines for California Environmental Quality Act*, can be found in the California Code of Regulations Title 14, Division 6, Chapter 3, Section 15000 et seq.

2 The analysis presented in this Draft EIR assumes an approximately 430,000 square foot project building. Since the time of Draft EIR development, the Project Applicant has since put forth a revised proposal for an approximately 424,320 square foot project building. Therefore, this Draft EIR describes a modestly larger structure and thus serves as a conservative analysis.

# 1.2 Environmental Review Process

## 1.2.1 Use of this EIR and Type of EIR

CEQA requires that all State and local government agencies consider the environmental consequences of projects over which they have discretionary authority. Consistent with CEQA, this Draft EIR is a public information document that assesses the potential physical environmental impacts that could result from construction and use of the 3600 Alameda Avenue Project, recommends mitigation measures to lessen or eliminate adverse impacts, and examines feasible alternatives to the Project. The Draft EIR's key purpose is to inform decision makers at the City of Oakland (City) and other responsible agencies, as well as the public. The City is the Lead Agency for purposes of CEQA, and will review and consider the information contained in this Draft EIR prior to taking action on the Project.

This Draft EIR provides information to be used in the planning and decision-making process. It is not the purpose of an EIR to recommend approval or denial of a project. The City has made this Draft EIR available for review and comment, as indicated in the Notice of Availability issued with this document and explained in Section 1.2.4, *Public Review of this Draft EIR*, below.

## 1.2.2 Scope of the EIR

This Draft EIR describes the Project and the existing environmental setting. It analyzes and discloses the direct and indirect potentially significant impacts that could result from construction and operation of the Project. The existing environmental setting (baseline) for the purpose of environmental review consists of conditions present on the Project site, its surroundings, and the region in April 2020, when the City published the Notice of Preparation (NOP) and began preparation of this Draft EIR. The NOP is included as Appendix A.

This Draft EIR concentrates the environmental analysis on the following topics that have the potential to have significant impacts on the environment:

- Air Quality
- Biological Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Noise
- Transportation and Circulation.

In accordance with CEQA Guidelines Section 15128, this Draft EIR includes Section 4.7, *Effects Not Found to Be Significant*, which provides substantial evidence to support the determination for each of the topics listed below (i.e., those not addressed in full detail in this Draft EIR and listed above) that (1) CEQA standards triggering preparation of further environmental review do not exist; and (2) impacts under these topics would be less than significant with incorporation of appropriate City Standard Conditions of Approval (SCAs):

- Aesthetics, Shadow, and Wind
- Agricultural and Forestry Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hydrology and Water Quality

- Land Use and Planning
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

### 1.2.3 Notice of Preparation and EIR Scoping

The City of Oakland published an NOP on April 4, 2022, pursuant to State CEQA Guidelines section 15082, indicating that an EIR would be prepared for the 3600 Alameda Avenue Project and inviting comments on the scope of the Draft EIR's analysis. The public comment period regarding the scope of the Draft EIR began on April 4, 2022 and ended on May 3, 2022, resulting in a 30-day comment period. The NOP was sent to property owners within 300 feet of the Project site, responsible and trustee agencies, organizations and other interested parties. A copy of the NOP was sent to the State Clearinghouse, to solicit statewide agency participation in determining the scope of the EIR, and to the County Clerk, who posted the NOP for 30 days.

During the comment period, a public scoping session was conducted by the Oakland Planning Commission on April 20, 2022, to provide a forum for public agencies and interested persons or groups to offer comments regarding the scope of the EIR. Oral and written comments received during the comment period addressed a range of CEQA-related topics; the most frequently raised scoping topics included construction noise, vibration, light pollution, and hazardous materials release; operational noise and air quality issues associated with Project traffic, parking, trucks; operational light pollution; pedestrian and bicycle safety associated with proposed street extensions; traffic congestion and emergency evacuation issues associated with Project passenger vehicle and truck traffic; and various issues associated with cut through traffic. The NOP and copies of all written scoping comments submitted are included in Appendix A. All of the comments have been taken into consideration in preparation of this Draft EIR.

### 1.2.4 Public Review of this Draft EIR

This Draft EIR is available for public review and comment July 10th through August 24th, as identified in the Notice of Availability/Notice of Completion (NOA/NOC) accompanying this document.

This Draft EIR and all supporting technical documents and reference materials are available for public review at the offices of the Oakland Planning and Building Department, located at 250 Frank Ogawa Plaza, Suite 2114, Oakland under Case PLN21223-ER01. The Draft EIR can also be found at https://www.oaklandca.gov/resources/current-environmental-review-ceqa-eir-documents-2011-present.

As indicated above, during the public review period, the City will hold public hearings where oral comments on the Draft EIR may be stated in the record.

Written comments may also be submitted to the City of Oakland Planning and Building Department at the address indicated on the notice or by email to pvollmann@oaklandca.gov.

As indicated in the notice accompanying this Draft EIR, the City need not consider certain comments filed after the close of the public comment period.

### 1.2.5 Final EIR

Following the public review and comment period on this Draft EIR, the City will prepare responses to comments received on the environmental analysis. The comments, responses, and any necessary revisions to the text of this Draft EIR will be prepared as a Responses to Comments document and made available to all persons who provided comments. The Draft EIR and its appendices, together with the Responses to Comments document will constitute the Final EIR, which shall be considered for certification by the City of Oakland Planning Commission. Before approval of the Project, the City, as lead agency and the decision-making entity, is required to certify that this EIR has been completed in compliance with CEQA, that the information in the EIR has been considered, and that the EIR reflects the independent judgment of the City. CEQA requires decision makers to balance the benefits of a project against its unavoidable environmental consequences. If environmental impacts are identified as significant and unavoidable, the City may still approve the project if it finds that social, economic, or other benefits outweigh the unavoidable impacts. The City would then be required to state in writing the specific reasons for approving the project, based on information in the EIR and other information sources in the administrative record. This reasoning is called a "statement of overriding considerations" (PRC Section 21081; State CEQA Guidelines Section 15093).

In addition, the City as lead agency must adopt a mitigation monitoring and reporting program describing the measures that were made a condition of project approval to avoid or mitigate significant effects on the environment (PRC Section 21081.6; State CEQA Guidelines Section 15097). The Standard Conditions of Approval and Mitigation Monitoring and Reporting Program (SCAMMRP) is adopted at the time of project approval and is designed to ensure compliance with the project description, any recommendations identified in City-approved technical reports, EIR mitigation measures, and with all SCAs set forth herein during and after project implementation. If the City decides to approve the Project, it would be responsible for verifying that the SCAMMRP for this Project is implemented.

The EIR will be used primarily by the City and other responsible agencies during approval of future discretionary actions and permits.

## 1.3 Organization of this Draft EIR

This Draft EIR document is organized as follows:

- **Chapter 1, Introduction** – This chapter includes a brief overview of the Project and the environmental review process, a description of the purpose of this Draft EIR and opportunities for public comment, and an explanation of how this Draft EIR is organized.
- **Chapter 2, Summary** – This chapter summarizes the Draft EIR, including a brief description of the Project based on the detailed description in Chapter 3 and summaries of the environmental impact findings from the Project analyses presented in Chapter 4. Pursuant to

CEQA Section 15123, the Summary presents: (1) each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; and (2) areas of controversy known to the City including issues raised by agencies and the public.

- **Chapter 3, Project Description** – This chapter describes the whole of the Project, including off-site improvements and infrastructure proposed to support the Project. The chapter describes the physical location of the site, the site's boundaries, and the Project Applicant's objectives, as well as the proposed uses and the physical design of the Project, its operational characteristics, and its phasing and construction processes. Consistent with State CEQA Guidelines Section 15124, this chapter also describes: (1) a list of the agencies that are expected to use the EIR in their decision making; (2) a list of permits and other approvals required to implement the Project; and (3) a list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

- **Chapter 4, Environmental Setting, Impacts, and Standard Conditions of Approval** – This chapter starts with an introduction that describes key environmental analysis terms used in this document and the analysis, including the impact classifications; applicability of significance criteria; the organization of each technical section of Chapter 4; and the cumulative analysis approach and setting.

  Following the introduction of the chapter, the analysis of each environmental topic is presented in a separate subsection. Each topical subsection describes the existing environmental setting of the Project site area, as well as the regulatory framework, and the significance criteria and methodology used to analyze each environmental topic. The chapter then presents results of the environmental analysis, including potential environmental impacts of the Project and the level of significance associated with each impact. Standard Conditions of Approval that would reduce the significance of potentially significant impacts to the extent feasible are described. The chapter then identifies the level of significance of each impact following incorporation of Standard Conditions of Approval. This chapter also includes a cumulative analysis to evaluate whether the Project's incremental effect is cumulatively considerable when combined with other projects causing related impacts.

  This chapter also includes Section 4.7, *Effects Not Found to Be Significant*. This section describes and evaluates the topics listed in Section 1.2.2, above. The analysis of each environmental topic applies a similar approach to Sections 4.1 through 4.6. The analysis provides the substantial evidence to support the determination that, for each of the specified topics, the Project would not have a significant impact on the environment.

- **Chapter 5, Project Variant** – This chapter describes and evaluates a variant to the Proposed Project so that it may be incorporated into the Project in the event the necessary land can be acquired and the necessary approvals can be obtained.

- **Chapter 6, Alternatives** – This chapter describes and evaluates alternatives that would feasibly attain most of the Project objectives as well as reduce or avoid significant environmental impacts associated with the Project. This chapter also describes alternatives that were considered but were rejected as infeasible and briefly explains the reasons underlying this determination.

- **Chapter 7, Impact Overview and Growth Inducement** – This chapter lists all Significant and Unavoidable Impacts and discusses Significant Irreversible Environmental Changes, and Growth-Inducing Impacts.

- **Chapter 8, Report Preparers** – This chapter identifies the preparers of this Draft EIR. Persons and documents consulted during preparation of the analysis are listed at the end of each section in Chapter 4 and the Appendices.

- **Appendices** – A series of appendices includes supporting background information relevant to the impact analyses contained in this Draft EIR.

# CHAPTER 2
# Summary

## 2.1 Introduction

As provided by Section 15123 of the California Environmental Quality Act (CEQA) Guidelines (CEQA Guidelines), this chapter provides a summary of the 3600 Alameda Avenue Project (Project) and its consequences. This chapter is intended to summarize in a stand-alone section the Project described in Chapter 3, *Project Description*, the impacts and Standard Conditions of Approval (SCAs) discussed in Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*, and the alternatives analysis presented in Chapter 6, *Alternatives*.

This Draft Environmental Impact Report (Draft EIR) has been prepared to evaluate the anticipated environmental effects of the Project in conformance with the provisions of CEQA and the CEQA Guidelines. The lead agency, the City of Oakland (City), is the public agency that has the principal responsibility for implementing the Project, which includes design review, approval of a tentative parcel map, and other approvals (referred to collectively hereafter as the Project).

## 2.2 Project Location

The Project site is located at 3600 Alameda Avenue near the Fruitvale neighborhood in the City of Oakland. The site is bordered by Fruitvale Ave on the west, Alameda Avenue on the south, 37th Avenue on the eastern, and Boehmer Street on the north.[1] The Project would consist of redevelopment of an approximately 23.9-acre site that is currently occupied by the former Owens-Illinois Glass Company Plant 20, which manufactured container glass and cardboard packaging material. Construction of the plant began in 1936, underwent several major expansions, and added glass recycling to its operations in 1988 when the company was renamed Owens-Brockway. Operations of Plant 20 ceased in 2015. The Project site is mostly hardscape including the former plant with minimal vegetation.

Existing uses in the Project vicinity include commercial and industrial uses to the east and west of the site as well as commercial and residential uses to the north. The Oakland Estuary is south of the Project site.

The Project site is accessible from Interstate 880, approximately 450 feet north of the site. Multiple transit routes serve the Project site including Alameda-Contra Costa County Transit District

[1] Generally, the street network in the Project vicinity does not align with a north–south/east–west orientation. This analysis assumes that Fruitvale Avenue is a north-south street and East 7th Street is an east-west street.

(AC Transit) Lines 19, 51A, 78, 851, and O along Fruitvale Avenue. The nearest bus stops to the Project site are on northbound Fruitvale Avenue between East 8th and East 9th Streets under the I-880 overpass and on southbound Fruitvale Avenue just north of East 9th Street. In addition, the Fruitvale Bay Area Rapid Transit District (BART) station is approximately 0.3 miles north of the Project site.

## 2.3 Project Description

The Project would construct an approximately 430,000 square foot industrial facility that would be able to accommodate a variety of uses that may consist of manufacturing, research and development, warehousing, or industrial uses.[2] The new facility would include up to 30,000 square feet of accessory office space, 25,000 of which would be split between the northwest corner of the building at the main entrance, the central-northern portion of the building, and the northeastern corner of the building depending on the number of tenants occupying the building. An additional 5,000 square feet of accessory office space would be provided at a mezzanine level. The Project would have a 42-foot clear height with a floor area ratio (FAR) of 0.42.

In addition to the industrial building, the Project would include 295 parking spaces in an employee parking lot north and east of the building and a landscaped buffer between the parking lot and the northern Project site boundary. To the south of the industrial building, the Project would construct a loading dock with 48 dock doors and 228 trailer parking stalls. The Project would also include an outdoor eating area adjacent to Fruitvale Avenue for use by project employees and would reserve a parcel in the southeastern corner of the site which could be developed as either restaurant or retail uses in the future. For the purposes of a conservative analyses Project operations is assumed to include an approximately 10,000 square-foot café/restaurant at that location.

The Project would also make improvements to the site including reconstruction of all sidewalks surrounding the property, realign Alameda Avenue to enhance shoreline and Bay Trail access, re-open Boehmer Street to create a new connection between 36th and 37th Avenues, and extend 37th Avenue to Alameda Avenue. The Project would create an intersection at Alameda Avenue and 37th Avenue and improve the Fruitvale Avenue corridor to improve pedestrian safety. The potential future extension of East 7th Street by creating a new public right-of-way from Fruitvale Avenue to Boehmer Street for a connection through to 37th Avenue, is analyzed as a variant to the Project. This Project variant was initially part of the Project but was amended to be analyzed as a variant due to the infeasibility of its implementation at this time, as further explained in the Project Description Chapter of this document.

Project construction would demolish all existing structures and surface parking lots. Construction activities would also include excavation and shoring, foundation and below-grade construction,

[2] The analysis presented in this Draft EIR assumes an approximately 430,000 square foot project building. Since the time of Draft EIR development, the Project Applicant has since put forth a revised proposal for an approximately 424,320 square foot project building. Therefore, this Draft EIR describes a modestly larger structure and thus serves as a conservative analysis.

and building construction including finishing interiors. Project construction is expected to commence in the first quarter of 2024 and occur over approximately 17 months.

## 2.4 Impacts of the Project

As provided by CEQA Guidelines Section 15123(b)(1), an EIR must provide a summary of the impacts, mitigation measures, and significant impacts after mitigation for a proposed Project. This information is presented in Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*, of this EIR, and summarized in **Table 2-1** at the end of this chapter.

No Project impacts were identified for several topics including; mineral resources; wildfire; aesthetics (wind); agriculture and forestry resources; air quality (health risk to new receptors); biological resources (riparian habitat or other sensitive natural communities, conflict with a habitat conservation plan); geological resources (fault rupture, landslides, landfills, wastewater disposal); hydrology (flood hazards); land use (conflict with a natural communities conservation plan); noise (state and regulatory agency noise standards, operational vibration, airport related noise); and population and housing (displacement).

With Standard Conditions of Approval (SCAs) applied, the Project would result in impacts that would not require additional measures to mitigate the impact—i.e., that would be "less than significant"—for all remaining topics including aesthetics; air quality; biological resources; cultural resources; energy; greenhouse gas emissions; geology, soils, and paleontological resources; hazards and hazardous materials; hydrology and water quality ; land use; noise and vibration ; population and housing; public services; recreation; transportation and circulation; tribal cultural resources; and utilities and service systems.

Mitigation measures in addition to SCAs are required to reduce potentially significant environmental impacts of the Project to biological resources (nesting birds and roosting bats).

## 2.5 Alternatives to the Project

Chapter 6, *Alternatives to the Project*, analyzes a range of reasonable alternatives to the Project, including the No Project Alternative (Alternative 1), and the No Street Extension Alternative (Alternative 2). Project impacts that would be significant and unavoidable have not been identified; accordingly, the focus of the alternatives analysis is on assessing: (1) the extent to which the alternative would avoid or lessen the identified less-than-significant (with or without SCAs) environmental effects of the Project identified in Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*; and (2) whether the alternatives meet the basic objectives of the Project.

The analysis of the alternatives, including a comparison of alternatives to the Project, is presented in Chapter 6, which provides a summary of impact levels within all environmental topic areas. Based on the evaluation described in Chapter 6, the No Project Alternative would be environmentally superior to the Project. However, the No Project Alternative would not meet any of the basic objectives of the Project. CEQA requires that a second alternative be identified when

the "No Project" alternative is the environmentally superior alternative (CEQA *Guidelines*, Section 15126.6(e)). Therefore, based on its combined slight reduction in construction-related air quality and noise impacts and its ability to meet most of the basic objectives of the Project (though would do so to a lesser degree for objectives pertaining to creating network connections and consistency with the Central Estuary Area Plan), the No Street Extension Alternative would be the Environmentally Superior Alternative for the purpose of this analysis. However, note that although the alternatives identified reduce impacts, they would not substantially lessen or avoid significant environmental effects of the Project because the Project itself would not result in significant impacts.

## 2.6 Comments on Notice of Preparation

In accordance with the CEQA Guidelines, the City distributed a Notice of Preparation of an EIR (NOP) for the EIR to affected agencies and the public for the required 30-day period. The public comment period regarding the scope of the Draft EIR began on April 4, 2022, ending on May 3, 2022, resulting in a 30-day comment period. The NOP and comments submitted during the EIR scoping comment period are included in Appendix A of this Draft EIR.

## 2.7 Areas of Controversy

Section 15123(b)(2) of the State CEQA Guidelines requires that an EIR summary identify areas of controversy known to the Lead Agency (City of Oakland), including those issues and concerns identified by agencies, organizations, and individuals in response to the City's Notice of Preparation (NOP) published on April 2, 2022. Areas of potential controversy or interest regarding the Project, based on the number of public comments received, address:

- Aesthetics (light pollution associated with Project construction and operation);
- Air quality (operational air quality associated with Project traffic, parking, and trucks);
- Hazards and hazardous materials (risk of release during construction);
- Noise (construction noise and vibration, and operational noise associated with Project traffic, parking, and trucks); and
- Transportation (increased congestion, pedestrian and bicycle safety associated with proposed street extensions, emergency evacuation issues associated with Project passenger vehicle and truck traffic, various issues associated with cut through traffic).

The NOP and comments received in response to the NOP are included in Appendix A.

## 2.8 Issues to Be Resolved

CEQA Guidelines Section 15123(b)(3) requires that an EIR present the issues to be resolved including the choice among alternatives and whether or how to mitigate identified significant effects. The major issues to be resolved for the Project include decisions by the City of Oakland, as the Lead Agency, as to whether:

- This EIR adequately describes the environmental impacts of the Project;
- Additional mitigation measures need to be applied to the Project;
- Feasible alternatives exist that would achieve the objectives of the Project and reduce significant environmental impacts; and
- The Project should or should not be approved.

**TABLE 2-1**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.1, *Air Quality*** | | |
| **Impact AIR-1:** Project construction would not generate average daily emissions in excess of 54 pounds per day of ROG, NOX, or PM2.5 or 82 pounds per day of PM10. (Criterion 1) (*Less than Significant with SCAs*) | **SCA AIR-1: Dust Controls – Construction Related** (*Standard Condition of Approval 20*)<br>**Requirement:** The project applicant shall implement all of the following applicable dust control measures during construction of the project:<br>a) Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible.<br>b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).<br>c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.<br>d) Limit vehicle speeds on unpaved roads to 15 miles per hour.<br>e) All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph.<br>f) All trucks and equipment, including tires, shall be washed off prior to leaving the site.<br>g) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.<br>**Enhanced Controls:** All "Basic" controls listed above plus the following controls if the project involves:<br>• Extensive site preparation (i.e., the construction site is four acres or more in size); or<br>• Extensive soil transport (i.e., 10,000 or more cubic yards of soil import/export).]<br>h) Apply and maintain vegetative ground cover (e.g., hydroseed) or non-toxic soil stabilizers to disturbed areas of soil that will be inactive for more than one month. Enclose, cover, water twice daily, or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).<br>i) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.<br>j) When working at a site, install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of the site, to minimize wind-blown dust. Windbreaks must have a maximum 50 percent air porosity.<br>k) Post a publicly visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City's Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours.<br>l) All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.1, *Air Quality* (continued)** | | |
| **Impact AIR-1** (cont.) | **SCA AIR-2: Criteria Air Pollutants – Construction Related** (*Standard Condition of Approval 21*)<br><br>**Requirement:** The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:<br><br>a) Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.<br><br>b) Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations").<br><br>c) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed.<br><br>d) Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand.<br><br>e) Low-VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.<br><br>f) All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") and upon request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met.<br><br>**Enhanced Controls:** All "Basic" controls listed above plus the following controls if the project involves:<br><br>• Construction activities with average daily emissions exceeding the CEQA thresholds for construction activity, currently 54 pounds per day of ROG, NOx, or $PM_{2.5}$ or 82 pounds per day of $PM_{10}$.<br><br>g) Criteria Air Pollutant Reduction Measures<br><br>**Requirement:** The project applicant shall retain a qualified air quality consultant to identify criteria air pollutant reduction measures to reduce the project's average daily emissions below 54 pounds per day of ROG, NOx, or $PM_{2.5}$ or 82 pounds per day of $PM_{10}$. Quantified emissions and identified reduction measures shall be submitted to the City (and the Air District if specifically requested) for review and approval prior to the issuance of building permits and the approved criteria air pollutant reduction measures shall be implemented during construction.<br><br>h) Construction Emissions Minimization Plan | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.1, *Air Quality* (continued)** | | |
| **Impact AIR-1** (cont.) | **Requirement:** The project applicant shall prepare a Construction Emissions Minimization Plan (Emissions Plan) for all identified criteria air pollutant reduction measures. The Emissions Plan shall be submitted to the City (and the B if specifically requested) for review and approval prior to the issuance of building permits. The Emissions Plan shall include the following:<br>i. An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all Verified Diesel Emissions Control Strategies (VDECS), the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.<br>ii. A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract. | |
| **Impact AIR-2:** Project operation would not generate average daily emissions of 54 pounds per day of ROG, NOX, or PM2.5 or 82 pounds per day of PM10; or result in maximum annual emissions of 10 tons per year of ROG, NOX, or PM2.5 or 15 tons per year of PM10. (Criterion 2) *(Less than Significant)* | None required | Less Than Significant |
| **Impact AIR-3:** Project construction would not contribute to CO concentrations that exceed the CAAQS of 9 ppm averaged over eight hours and 20 ppm for one hour. (Criterion 3) *(Less than Significant)* | None required | Less Than Significant |
| **Impact AIR-4:** The Project would not create new sources of TACs during Project construction or operation that would expose existing sensitive receptors in the vicinity to health risk levels in excess of the City's project-level thresholds. (Criterion 4) (*Less than Significant with SCAs*) | **SCA AIR-3: Diesel Particulate Matter Controls – Construction Related** (*Standard Condition of Approval 22*)<br>***a. Diesel Particulate Matter Reduction Measures***<br>**Requirement:** The project applicant shall implement appropriate measures during construction to reduce potential health risks to sensitive receptors due to exposure to diesel particulate matter (DPM) from construction emissions. The project applicant shall choose **one** of the following methods:<br>i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with current guidance from the California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment to determine the health risk to sensitive receptors exposed to DPM from project construction emissions. The HRA shall be submitted to the City (and the Air District if specifically requested) for review and approval. If the HRA concludes that the health risk is at or | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.1, *Air Quality* (continued)** | | |
| **Impact AIR-4** (cont.) | below acceptable levels, then DPM reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, DPM reduction measures shall be identified to reduce the health risk to acceptable levels as set forth under subsection b below. Identified DPM reduction measures shall be submitted to the City for review and approval prior to the issuance of building permits and the approved DPM reduction measures shall be implemented during construction.<br><br>OR<br><br>ii. All off-road diesel equipment shall be equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by CARB. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. This shall be verified through an equipment inventory submittal and Certification Statement that the Contractor agrees to compliance and acknowledges that a significant violation of this requirement shall constitute a material breach of contract.<br><br>***b. Construction Emissions Minimization Plan (if required by a above***<br><br>**Requirement:** The project applicant shall prepare a Construction Emissions Minimization Plan (Emissions Plan) for all identified DPM reduction measures (if any). The Emissions Plan shall be submitted to the City (and the Bay Area Air Quality District if specifically requested) for review and approval prior to the issuance of building permits. The Emissions Plan shall include the following:<br><br>i. An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.<br><br>ii. A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract.<br><br>**SCA AIR-4: Stationary Sources of Air Pollution - Toxic Air Contaminants** (*Standard Condition of Approval 24*)<br><br>**Requirement:** The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants. The project applicant shall choose one of the following methods:<br><br>a. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk associated with proposed stationary sources of pollution in the project. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. The approved risk reduction measures shall be implemented during construction and/or operations as applicable.<br><br>OR | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.1, *Air Quality* (continued)** | | |
| **Impact AIR-4** (cont.) | b. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City:<br>i. Installation of non-diesel fueled generators, if feasible, or;<br>ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible.<br>**SCA AIR-5: Truck-Related Risk Reduction Measures – Toxic Air Contaminants** (*Standard Condition of Approval 25*)<br>***a. Truck Loading Docks***<br>**Requirement:** The project applicant shall locate proposed truck loading docks as far from nearby sensitive receptors as feasible.<br>***b. Truck Fleet Emission Standards***<br>**Requirement:** The project applicant shall comply with all applicable California Air Resources Board (CARB) requirements to control emissions from diesel engines and demonstrate compliance to the satisfaction of the City. Methods to comply include, but are not limited to, new clean diesel trucks, higher-tier diesel engine trucks with added Particulate Matter (PM) filters, hybrid trucks, alternative energy trucks, or other methods that achieve the applicable CARB emission standard. Compliance with this requirement shall be verified through CARB's Verification Procedures for In-Use Strategies to Control Emissions from Diesel Engines.<br>**SCA AIR-6: Asbestos in Structures** (*Standard Condition of Approval 26*)<br>**Requirement:** The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request. | |
| **Impact AIR-5:** The Project would not create or expose sensitive receptors to substantial odors affecting a substantial number of people. (Criterion 6) *(Less than Significant)* | None required | Less Than Significant |
| **Impact AIR-6:** Construction and operation of the Project would not conflict with or obstruct implementation of the applicable air quality plan. (Appendix G criterion a) *(Less than Significant with SCAs)* | **SCA AIR-1: Dust Controls – Construction Related.** See above.<br>**SCA AIR-2: Criteria Air Pollutants – Construction Related.** See above.<br>**SCA TRANS-3: Transportation and Parking Demand Management.** See Transportation and Circulation below. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.1, *Air Quality* (continued)** | | |
| **Impact AIR-1.CU:** Construction and operational activities associated with the Project would not result in a cumulatively considerable increase in emissions for which the SFBAAB is in non-attainment under an applicable federal or State ambient air quality standard. (Criteria 1 and 2) *(Less than Significant with SCAs)* | **SCA AIR-1: Dust Controls – Construction Related.** See above.<br>**SCA AIR-2: Criteria Air Pollutants – Construction Related.** See above. | Less Than Significant |
| **Impact AIR-2.CU:** Construction and operational activities associated with the Project would not contribute considerably to cumulative emissions of TACs and PM2.5 that could expose sensitive receptors to substantial pollutant concentrations or health risks above the City's cumulative thresholds. (Criterion 4) *(Less than Significant)* | None required | Less Than Significant |
| **Impact AIR-3.CU:** Construction and operational activities associated with the Project would not contribute considerably to cumulative emissions of TACs and $PM_{2.5}$ that could expose sensitive receptors to substantial pollutant concentrations or health risks above the City's cumulative thresholds. (Criterion 4) (*Less than Significant with SCAs*) | **SCA AIR-3: Diesel Particulate Matter Controls – Construction Related.** See above.<br>**SCA AIR-4: Stationary Sources of Air Pollution - Toxic Air Contaminants.** See above.<br>**SCA AIR-5: Truck-Related Risk Reduction Measures – Toxic Air Contaminants.** See above.<br>**SCA AIR-6: Asbestos in Structures.** See above. | Less Than Significant |
| **Impact AIR-4.CU:** The Project, in combination with other cumulative projects, would not create or expose sensitive receptors to substantial odors affecting a substantial number of people. (Criterion 6) (*Less than Significant*) | None required | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.2, *Biological Resources*** | | |
| **Impact BIO-1:** Implementation of the Project would not have a substantial adverse effect, either directly, indirectly, or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS (nesting birds and roosting bats). (*Less-than-Significant Impact, with SCAs and Mitigation*) | **SCA BIO-2: Tree Removal During Bird Breeding Season.** *(Standard Condition of Approval 29)*<br><br>**Requirement:** To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.<br><br>**Mitigation Measure BIO-1: Worker Environmental Awareness Program Training.** Project-specific Worker Environmental Awareness Program (WEAP) training shall be developed by a qualified biologist and provided to all Project personnel prior to the start of Project demolition/construction or tree removal work. The training can be provided in a brochure or as a video. The WEAP training shall generally include, but not be limited to, education about the following:<br><br>a) Environmental rules and regulations, and penalties for non-compliance.<br><br>b) Avoidance measures and a protocol to follow, including a communication chain, if nesting birds or roosting bats are encountered.<br><br>**Mitigation Measure BIO-2: Avoid and Minimize Impacts on Nesting Birds.** The Project Applicant shall take adequate measures to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act when in active use. This shall be accomplished by taking the following steps.<br><br>a) If vegetation removal and/or construction is proposed during the nesting season (February 15 to August 31), a pre-construction survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of vegetation removal and/or construction, to identify any active nests in the Project area and in the vicinity of proposed construction. Surveys shall be performed for the Project area, vehicle and equipment staging areas, and suitable habitat within 150 feet of the Project area boundary to locate any active passerine (e.g., songbird) nests and within 250 feet of the Project area boundary to locate any active raptor (bird of prey) nests.<br><br>b) If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September 1 to February 14), construction may proceed with no restrictions.<br><br>c) If bird nests are found, the qualified biologist shall establish an adequate no-disturbance buffer zone around the nest location. Construction activities and/or vegetation removal shall be restricted within the no-disturbance buffer zone until the qualified biologist has confirmed that any young birds have fledged and are able to leave the construction area. Required setback distances for the no-disturbance buffer zone shall be established by the qualified biologist and may vary depending on species, line-of-sight between the nest and the construction activity, and the birds' sensitivity to disturbance. Buffer sizes shall initially be 200 feet for raptors and 50 feet for other birds, but may be modified, as appropriate, by the qualified biologist based on site conditions. As deemed necessary by the qualified biologist, the no-disturbance buffer zone shall be fenced with temporary orange construction fencing. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.2, *Biological Resources* (continued)** | | |
| **Impact BIO-1** (cont.) | d) Any birds that begin nesting within the Project area and survey buffers amid construction activities shall be assumed to be habituated to construction-related or similar noise and disturbance levels and no work exclusion zones shall be established around active nests in these cases; however, should birds nesting nearby begin to show disturbance associated with construction activities, no-disturbance buffer zones shall be established as determined by the qualified wildlife biologist.<br>e) Any work that must occur within established no-disturbance buffer zones around active nests shall be monitored by a qualified biologist. If adverse effects in response to Project work within the buffer are observed and could compromise the nest's success, work within the no-disturbance buffer shall halt until the nest occupants have fledged.<br>f) A report of findings shall be prepared by the qualified biologist and submitted to the City for review and approval prior to initiation of construction within any no-disturbance buffer zone during the nesting season. The report shall either confirm absence of any active nests or shall confirm that any young within a designated no-disturbance zone and construction can proceed.<br>**Mitigation Measure BIO-3: Avoid and Minimize Impacts on Roosting Bats.** A qualified biologist who is experienced with bat surveying techniques (including auditory sampling methods), behavior, roosting habitat, and identification of local bat species shall be consulted prior to demolition or building relocation activities to conduct a pre-construction habitat assessment of the Project area (focusing on buildings to be demolished or relocated) to characterize potential bat habitat and identify potentially active roost sites. No further action is required should the pre-construction habitat assessment not identify potential bat roosting habitat or signs of potentially active bat roosts within the Project area (e.g., guano, urine staining, dead bats, etc.).<br>The following measures shall be implemented should potential bat roosting habitat or potentially active bat roosts be identified during the habitat assessment in buildings to be demolished within the study area:<br>a) In areas identified as potential roosting habitat during the habitat assessment, initial building demolition shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, to the extent feasible. These periods avoid the bat maternity roosting season and period of winter torpor.[3]<br>b) Buildings with potential bat roosting habitat or active (outside of maternity and winter torpor seasons) roosts shall be disturbed only under clear weather conditions when precipitation is not forecast for three days and when daytime temperatures are at least 50 degrees Fahrenheit.<br>c) The demolition or relocation of buildings containing or suspected of containing potential bat roosting habitat or active bat roosts shall be done under the supervision of the qualified biologist. When appropriate, buildings shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost, likely in the evening and after bats have emerged from the roost to forage. Under no circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist.<br>d) If avoidance of the bat maternity roosting season and period of winter torpor, defined under a), above, is infeasible, the qualified biologist shall conduct pre-construction surveys of potential bat roost sites identified during the initial habitat assessment no more than 14 days prior to building demolition. | |

[3] Torpor refers to a state of decreased physiological activity with reduced body temperature and metabolic rate.

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.2, *Biological Resources* (continued)** | | |
| **Impact BIO-1** (cont.) | e) If active bat roosts or evidence of roosting is identified during pre-construction surveys for building demolition, the qualified biologist shall determine, if possible, the type of roost and species. A no-disturbance buffer shall be established around roost sites until the start of the seasonal windows identified above, or until the qualified biologist determines roost sites are no longer active. The size of the no-disturbance buffer would be determined by the qualified biologist and would depend on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of construction activity that would occur around the roost site. | |
| **Impact BIO-2:** Implementation of the Project would not have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS. (*No Impact*) | None required | No Impact |
| **Impact BIO-3:** Implementation of the Project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (*Less than Significant with SCAs*) | **SCA HYD-1: State Construction General Permit.** See Hydrology and Water Quality below.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Hydrology and Water Quality below.<br>**SCA HYD-3: Vegetation Management on Creekside Properties.** See Hydrology and Water Quality below.<br>**SCY HYD-4: Creek Protection Permit.** See Hydrology and Water Quality below.<br>**SCA UTIL-5: Storm Drain System.** See Utilities and Service Systems below. | Less Than Significant |
| **Impact BIO-4:** Implementation of the Project would not interfere substantially with the movement of a 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 with SCAs)* | **SCA BIO-1: Bird Collision Reduction Measures.** *(Standard Condition of Approval 28)*<br>**Requirement:** The project applicant shall submit a Bird Collision Reduction Plan for City review and approval to reduce potential bird collisions to the maximum feasible extent. The Plan shall include all of the following mandatory measures, as well as applicable and specific project Best Management Practice (BMP) strategies to reduce bird strike impacts to the maximum feasible extent. The project applicant shall implement the approved Plan. Mandatory measures include all of the following:<br>i. For large buildings subject to federal aviation safety regulations, install minimum intensity white strobe lighting with three second flash instead of solid red or rotating lights.<br>ii. Minimize the number of and co-locate rooftop-antennas and other rooftop structures.<br>iii. Monopole structures or antennas shall not include guy wires.<br>iv. Avoid the use of mirrors in landscape design. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.2, *Biological Resources* (continued)** | | |
| **Impact BIO-4** (cont.) | v. Avoid placement of bird-friendly attractants (i.e., landscaped areas, vegetated roofs, water features) near glass unless shielded by architectural features taller than the attractant that incorporate bird friendly treatments no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule), as explained below.<br>vi. Apply bird-friendly glazing treatments to no less than 90 percent of all windows and glass between the ground and 60 feet above ground or to the height of existing adjacent landscape or the height of the proposed landscape. Examples of bird-friendly glazing treatments include the following:<br>• Use opaque glass in windowpanes instead of reflective glass.<br>• Uniformly cover the interior or exterior of clear glass surface with patterns (e.g., dots, stripes, decals, images, abstract patterns). Patterns can be etched, fritted, or on films and shall have a density of no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule).<br>• Install paned glass with fenestration patterns with vertical and horizontal mullions no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule).<br>• Install external screens over non-reflective glass (as close to the glass as possible) for birds to perceive windows as solid objects.<br>• Install UV-pattern reflective glass, laminated glass with a patterned UV-reflective coating, or UV-absorbing and UV-reflecting film on the glass since both most birds can see ultraviolet light, which is invisible to humans.<br>• Install decorative grilles, screens, netting, or louvers, with openings no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule).<br>• Install awnings, overhangs, sunshades, or light shelves directly adjacent to clear glass which is recessed on all sides.<br>• Install opaque window film with a pattern/design which also adheres to the "two-by-four" rule for coverage.<br>vii. Reduce light pollution. Examples include the following:<br>• Extinguish nighttime architectural illumination treatments during bird migration season (February 15 to May 15 and August 15 to November 30).<br>• Install time switch control devices or occupancy sensors on non-emergency interior lights that can be programmed to turn off during non-work hours and between 11:00 p.m. and sunrise.<br>• Reduce perimeter lighting whenever possible.<br>• Install full cut-off, shielded, or directional lighting to minimize light spillage, glare, or light trespass.<br>• Do not use beams of lights during the spring (February 15 to May 15) or fall (August 15 to November 30) migration.<br>viii. Develop and implement a building operation and management manual that promotes bird safety. Example measures in the manual include the following: | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.2, *Biological Resources* (continued)** | | |
| **Impact BIO-4** (cont.) | • Donation of discovered dead bird specimens to an authorized bird conservation organization or museums (e.g., UC Berkeley Museum of Vertebrate Zoology) to aid in species identification and to benefit scientific study, as per all federal, state and local laws.<br>• Distribution of educational materials on bird-safe practices for the building occupants. Contact Golden Gate Audubon Society or American Bird Conservancy for materials.<br>• Asking employees to turn off task lighting at their work stations and draw office blinds, shades, curtains, or other window coverings at end of work day.<br>• Install interior blinds, shades, or other window coverings in windows above the ground floor visible from the exterior as part of the construction contract, lease agreement, or CC&R.<br>• Schedule nightly maintenance during the day or to conclude before 11 p.m., if possible. | |
| **Impact BIO-5:** Implementation of the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. *(Less than Significant with SCAs*) | **SCA BIO-3: Tree Permit.** *(Standard Condition of Approval 30)*<br>***a. Tree Permit Required.***<br>**Requirement:** Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit.<br>***b. Tree Protection During Construction.***<br>**Requirement:** Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:<br>i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.<br>ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.<br>iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.2, *Biological Resources* (continued)** | | |
| **Impact BIO-5** (cont.) | iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.<br>v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.<br>vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.<br>***c. Tree Replacement Plantings.***<br>**Requirement:** Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria:<br>i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.<br>ii. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia californica (California Bay Laurel), or other tree species acceptable to the Tree Division.<br>iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.<br>iv. Minimum planting areas must be available on site as follows:<br>• For Sequoia sempervirens, three hundred fifteen (315) square feet per tree;<br>• For other species listed, seven hundred (700) square feet per tree.<br>In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in City parks, streets and medians.<br>vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.2, *Biological Resources* (continued)** | | |
| **Impact BIO-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts on biological resources. *(Less than Significant with SCAs)* | **SCA BIO-1: Bird Collision Reduction Measures.** See above.<br>**SCA BIO-2: Tree Removal During Birding Season.** See above.<br>**SCA BIO-3: Tree Permit.** See above.<br>**SCA HYD-1: State Construction General Permit.** See Hydrology and Water Quality below.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Hydrology and Water Quality below.<br>**SCA HYD-3: Vegetation Management on Creekside Properties.** See Hydrology and Water Quality below.<br>**SCY HYD-4: Creek Protection Permit.** See Hydrology and Water Quality below.<br>**SCA UTIL-5: Storm Drain System.** See Utilities and Service Systems below.<br>**Mitigation Measure BIO-1: Worker Environmental Awareness Program Training.** See above.<br>**Mitigation Measure BIO-2: Minimize Impacts to Nesting Birds.** See above.<br>**Mitigation Measure BIO-3: Avoid and Minimize Impact on Roosting Bats.** See above. | Less Than Significant |
| **EIR Section 4.3, *Greenhouse Gas Emissions*** | | |
| **Impact GHG-1:** The Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Criterion 1) *(Less than significant with SCAs)* | **SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan.** *(Standard Condition of Approval 42)*<br>***a. Greenhouse Gas (GHG) Reduction Plan Required***<br>**Requirement:** The project applicant shall retain a qualified air quality consultant to develop a Greenhouse Gas (GHG) Reduction Plan for City review and approval and shall implement the approved GHG Reduction Plan.<br>The goal of the GHG Reduction Plan shall be to increase energy efficiency and to reduce GHG emissions to at least the amount that would be achieved by committing to all of the emissions reductions strategies identified on the ECAP Consistency Checklist as the City's project-level implementation of its Equitable Climate Action Plan (adopted in 2020), which calls for reducing city-wide GHG emissions by 56 percent below 2005 levels by 2030 and 83 percent by 2050. The GHG Reduction Plan shall include, at a minimum, (a) a detailed quantified GHG emissions inventory for the project taking into consideration energy efficiencies included as part of the project (including proposed mitigation measures, project design features, those strategies being implemented and other City requirements), (b) for each ECAP Consistency Checklist strategy that the project will not meet, a quantified calculation of the additional GHG emission reductions that would have occurred had it implemented the GHG emissions reduction measure consistent with the ECAP Consistency Checklist, (c) a quantified strategy for achieving an GHG emission reduction equivalent to the reduction that would have resulted from complying with the ECAP Consistency Checklist strategy, and (d) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented.<br>If the project is to be constructed in phases, the GHG Reduction Plan shall provide GHG emission scenarios by phase. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.3, *Greenhouse Gas Emissions* (continued)** | | |
| **Impact GHG-1** (cont.) | Potential additional GHG reduction measures to be considered include, but are not be limited to, measures recommended in BAAQMD's latest CEQA Air Quality Guidelines, the California Air Resources Board Scoping Plan (December 2008, as may be revised), the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures (August 2010, as may be revised), the California Attorney General's website, and Reference Guides on Leadership in Energy and Environmental Design (LEED) published by the U.S. Green Building Council. The types of allowable GHG reduction measures include the following (listed in order of City preference): (1) physical design features; (2) operational features; and (3) the payment of fees to fund GHG-reducing programs (i.e., the purchase of "carbon credits") as explained below.<br><br>The allowable locations of the GHG reduction measures include the following (listed in order of City preference): (1) the project site; (2) off-site within the City of Oakland; (3) off-site within the San Francisco Bay Area Air Basin; then (4) off-site within the State of California.<br><br>As with preferred locations for the implementation of all GHG reductions measures, the preference for carbon credit purchases include those that can be achieved as follows (listed in order of City preference): (1) within the City of Oakland; (2) within the San Francisco Bay Area Air Basin; then (3) within the State of California. The cost of carbon credit purchases shall be based on current market value at the time purchased and shall be based on the project's net difference operational emissions estimated in the GHG Reduction Plan for the project as compared to the Checklist baseline.<br><br>For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be included on the drawings submitted for construction-related permits.<br><br>***b. GHG Reduction Plan Implementation During Construction***<br><br>**Requirement:** The project applicant shall implement the GHG Reduction Plan during construction of the project. For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be implemented during construction. For physical GHG reduction measures to be incorporated into off-site projects, the project applicant shall obtain all necessary permits/approvals and the measures shall be included on drawings and submitted to the City Planning Director or his/her designee for review and approval. These off-site improvements shall be installed prior to completion of the subject project (or prior to completion of the project phase for phased projects). For GHG reduction measures involving the purchase of carbon credits, evidence of the payment/purchase shall be submitted to the City for review and approval prior to completion of the project (or prior to completion of the project phase, for phased projects).<br><br>***c. GHG Reduction Plan Implementation After Construction***<br><br>**Requirement:** The project applicant shall implement the GHG Reduction Plan after construction of the project (or at the completion of the project phase for phased projects). For operational GHG reduction measures to be incorporated into the project or off-site projects, the measures shall be implemented on an indefinite and ongoing basis.<br><br>The project applicant shall satisfy the following requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. The GHG Reduction Plan requires regular periodic evaluation over the life of the project (generally estimated to be at least 40 years) to determine how the Plan is achieving required GHG emissions reductions over time, as well as the efficacy of the specific additional GHG reduction measures identified in the Plan. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.3, *Greenhouse Gas Emissions* (continued)** | | |
| **Impact GHG-1** (cont.) | **Annual Report.** Implementation of the GHG reduction measures and related requirements shall be ensured through compliance with Conditions of Approval adopted for the project. Generally, starting two years after the City issues the first Certificate of Occupancy for the project, the project applicant shall prepare each year of the useful life of the project an Annual GHG Emissions Reduction Report ("Annual Report"), for review and approval by the City Planning Director or his/her designee. The Annual Report shall be submitted to an independent reviewer of the City's choosing, to be paid for by the project applicant.<br><br>The Annual Report shall summarize the project's implementation of GHG reduction measures over the preceding year, intended upcoming changes, compliance with the conditions of the Plan, and include a brief summary of the previous year's Annual Report results (starting the second year). The Annual Report shall include a comparison of annual project emissions to the Checklist baseline emissions reported in the GHG Plan.<br><br>The GHG Reduction Plan shall be considered fully attained when project emissions are less than the Checklist baseline, as confirmed by the City through an established monitoring program. Monitoring and reporting activities will continue at the City's discretion, as discussed below.<br><br>**Corrective Procedure.** If the third Annual Report, or any report thereafter, indicates that, in spite of the implementation of the GHG Reduction Plan, the project is not achieving the GHG reduction goal, the project applicant shall prepare a report for City review and approval, which proposes additional or revised GHG measures to better achieve the GHG emissions reduction goals, including without limitation, a discussion on the feasibility and effectiveness of the menu of other additional measures ("Corrective GHG Action Plan"). The project applicant shall then implement the approved Corrective GHG Action Plan.<br><br>If, one year after the Corrective GHG Action Plan is implemented, the required GHG emissions reduction target is still not being achieved, or if the project applicant fails to submit a report at the times described above, or if the reports do not meet City requirements outlined above, the City may, in addition to its other remedies, (a) assess the project applicant a financial penalty based upon actual percentage reduction in GHG emissions as compared to the percent reduction in GHG emissions established in the GHG Reduction Plan; or (b) refer the matter to the City Planning Commission for scheduling of a compliance hearing to determine whether the project's approvals should be revoked, altered or additional conditions of approval imposed.<br><br>The penalty as described in (a) above shall be determined by the City Planning Director or his/her designee and be commensurate with the percentage GHG emissions reduction not achieved compared to the applicable numeric significance thresholds described in the GHG Reduction Plan.<br><br>In determining whether a financial penalty or other remedy is appropriate, the City shall not impose a penalty if the project applicant has made a good faith effort to comply with the GHG Reduction Plan.<br><br>The City would only have the ability to impose a monetary penalty after a reasonable cure period and in accordance with the enforcement process outlined in Planning Code Chapter 17.152. If a financial penalty is imposed, such penalty sums shall be used by the City solely toward the implementation of the Equitable Climate Action Plan.<br><br>Timeline Discretion and Summary. The City shall have the discretion to reasonably modify the timing of reporting, with reasonable notice and opportunity to comment by the applicant, to coincide with other related monitoring and reporting required for the project. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.3, *Greenhouse Gas Emissions* (continued)** | | |
| **Impact GHG-1** (cont.) | **SCA AIR-3: Diesel Particulate Matter Controls – Construction Related.** See above.<br><br>**SCA AES-3: Landscape Plan.** See Aesthetics, Shadow, and Wind below.<br><br>**SCA AIR-2: Criteria Air Pollutant Controls - Construction Related.** See Air Quality above.<br><br>**SCA AIR-3: Diesel Particulate Matter Controls - Construction Related.** See Air Quality above.<br><br>**SCA TRANS-2: Bicycle Parking** *(Standard Condition of Approval 76)*<br><br>**Requirement:** The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.<br><br>**SCA TRANS-3: Transportation and Parking Demand Management Plan.** See Transportation and Circulation below.<br><br>**SCA TRANS-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure** *(Standard Condition of Approval 81)*<br><br>***a. PEV-Ready Parking Spaces***<br><br>**Requirement:** The applicant shall submit, for review and approval of the Building Official and the Zoning Manager, plans that show the location of parking spaces equipped with full electrical circuits designated for future PEV charging (i.e., "PEV-Ready) per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-Ready parking spaces.<br><br>***b. PEV-Capable Parking Spaces***<br><br>**Requirement:** The applicant shall submit, for review and approval of the Building Official, plans that show the location of inaccessible conduit to supply PEV-capable parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-capable parking spaces.<br><br>***c. ADA-Accessible Spaces***<br><br>**Requirement:** The applicant shall submit, for review and approval of the Building Official, plans that show the location of future accessible EV parking spaces as required under Title 24 Chapter 11B Table 11B-228.3.2.1, and specify plans to construct all future accessible EV parking spaces with appropriate grade, vertical clearance, and accessible path of travel to allow installation of accessible EV charging station(s).<br><br>**SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** See Utilities and Service Systems below.<br><br>**SCA UTIL-3: Green Building Requirements.** See Utilities and Service Systems below. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.3, *Greenhouse Gas Emissions* (continued)** | | |
| **Impact GHG-2:** The Project would not fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions. (Criterion 2) *(Less than Significant with SCAs)* | **SCA GHG-1: GHG Reduction Plan.** See above.<br>**SCA UTIL-3: Green Building Requirements.** See Utilities and Service Systems below. | Less Than Significant |
| **EIR Section 4.4, *Hazards and Hazardous Materials*** | | |
| **Impact HAZ-1:** The Project would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. The project site is located in a site that is on Government Code Section 65962.5 5. (Criteria 1, 2, and 5) *(Less than Significant with SCAs)* | **SCA HAZ-1: Hazardous Materials Related to Construction.** *(Standard Condition of Approval 43)*<br>**Requirement:** The Project Applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following:<br>a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction;<br>b. Avoid overtopping construction equipment fuel gas tanks;<br>c. During routine maintenance of construction equipment, properly contain and remove grease and oils;<br>d. Properly dispose of discarded containers of fuels and other chemicals;<br>e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and<br>f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the Project Applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.<br>**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** *(Standard Condition of Approval 44)*<br>***a. Hazardous Building Materials Assessment***<br>**Requirement:** The Project Applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by state or federal law. If lead-based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.4, *Hazards and Hazardous Materials* (continued)** | | |
| **Impact HAZ-1** (cont.) | present, the Project Applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The Project Applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.<br><br>***b. Environmental Site Assessment Required***<br><br>**Requirement:** The Project Applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The Project Applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.<br><br>***c. Health and Safety Plan Required***<br><br>**Requirement:** The Project Applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The Project Applicant shall implement the approved Plan.<br><br>***d. Best Management Practices (BMPs) Required for Contaminated Site***<br><br>**Requirement:** The Project Applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following:<br><br>i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements.<br><br>ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.<br><br>**SCA HAZ-3: Hazardous Materials Business Plan.** *(Standard Condition of Approval 45)*<br><br>**Requirement:** The Project Applicant shall submit a Hazardous Materials Business Plan for review and approval by the City, and shall implement the approved Plan. The approved Plan shall be kept on file with the City and the Project Applicant shall update the Plan as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle hazardous materials and provides information to the Fire Department should emergency response be required. Hazardous materials shall be handled in accordance with all applicable local, state, and federal requirements. The Hazardous Materials Business Plan shall include the following:<br><br>a. The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.<br><br>b. The location of such hazardous materials. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.4, *Hazards and Hazardous Materials* (continued)** | | |
| **Impact HAZ-1** (cont.) | c. An emergency response plan including employee training information.<br>d. A plan that describes the manner in which these materials are handled, transported, and disposed.<br>**SCA AIR-7: Asbestos in Structures.** See Air Quality above.<br>**SCA HYD-1: State Construction General Permit.** See Hydrology and Water Quality below. | |
| **Impact HAZ-2:** The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, hospital, or daycare center resulting in a significant impact (Criteria 3 and 4) *(Less than Significant with SCAs)* | **SCA HAZ-1: Hazardous Materials Related to Construction.** See above.<br>**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See above.<br>**SCA HAZ-3: Hazardous Materials Business Plan.** See above.<br>**SCA AIR-7: Asbestos in Structures.** See Air Quality above. | Less Than Significant |
| **Impact HAZ-3:** The Project would provide adequate emergency access and would not fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Criteria 6 and 9) *(Less than Significant with SCAs)* | **SCA TRANS-1: Construction Activity in the Public Right-of-Way** *(Standard Condition of Approval 75)*<br>***a. Obstruction Permit Required***<br>**Requirement:** The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets, sidewalks, bicycle facilities, and bus stops.<br>***b. Traffic Control Plan Required***<br>**Requirement:** In the event of obstructions to vehicle or bicycle travel lanes, bus stops, or sidewalks, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian accommodations (or detours, if accommodations are not feasible), including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The Traffic Control Plan shall be in conformance with the City's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists, and Bus Facilities in Construction Zones. The project applicant shall implement the approved Plan during construction.<br>***c. Repair of City Streets***<br>**Requirement:** The project applicant shall repair any damage to the public right-of way, including streets and sidewalks, caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.4, *Hazards and Hazardous Materials* (continued)** | | |
| **Impact HAZ-4:** The Project would not be located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport, public use airport, or private airstrip, and would not result in a significant safety hazard for people residing or working in the Project area. (Criteria 6 and 9) (*Less than Significant*) | None Required | Less Than Significant |
| **Impact HAZ-1.CU:** The Project, combined with cumulative development in the project vicinity, would not result in significant cumulative impacts relative to hazards and hazardous materials. *(Less than Significant with SCAs)* | **SCA HAZ-1: Hazardous Materials Related to Construction.** See above.<br>**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See above.<br>**SCA HAZ-3: Hazardous Materials Business Plan.** See above.<br>**SCA AIR-7: Asbestos in Structures.** See Air Quality above.<br>**SCA HYD-1: State Construction General Permit.** See Hydrology and Water Quality below.<br>**SCA TRANS-1: Construction Activity in the Public Right-of-Way.** See above. | Less Than Significant |
| **EIR Section 4.5, *Noise and Vibration*** | | |
| **Impact NOI-1:** Construction of the Project would not generate noise in violation of the noise ordinances of the Cities of Oakland or Alameda. (Criteria 1, 2 and 3) *(Less than Significant with SCAs)* | **SCA NOI-1: Construction Days/Hours.** *(Standard Condition of Approval 62)*<br>**Requirement:** The project applicant shall comply with the following restrictions concerning construction days and hours:<br>a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m.<br>b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday.<br>c. No construction is allowed on Sunday or federal holidays.<br>Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.5, *Noise and Vibration* (continued)** | | |
| **Impact NOI-1** (cont.) | Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.<br><br>**SCA NOI-2: Construction Noise.** (*Standard Condition of Approval 63)*<br><br>**Requirement:** The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following:<br><br>a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible.<br><br>b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.<br><br>c. Applicant shall use temporary power poles instead of generators where feasible.<br><br>d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.<br><br>e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.<br><br>**SCA NOI-3: Extreme Construction Noise.** *(Standard Condition of Approval 64)*<br><br>***a. Construction Noise Management Plan Required***<br><br>**Requirement:** Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90 dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following:<br><br>i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.5, *Noise and Vibration* (continued)** | | |
| **Impact NOI-1** (cont.) | ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;<br>iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;<br>iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and<br>v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.<br>***b. Public Notification Required***<br>**Requirement:** The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.<br>**SCA NOI-4: Project-Specific Construction Noise Reduction Measures.** *(Standard Condition of Approval 65)*<br>**Requirement:** The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction noise impacts on adjacent receptors along Elmwood Avenue. The project applicant shall implement the approved Plan during construction.<br>**SCA NOI-5: Construction Noise Complaints.** *(Standard Condition of Approval 66)*<br>**Requirement:** The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include:<br>a. Designation of an on-site construction complaint and enforcement manager for the project;<br>b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit;<br>c. Protocols for receiving, responding to, and tracking received complaints; and<br>d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.5, *Noise and Vibration* (continued)** | | |
| **Impact NOI-2:** Stationary sources associated with the operation of the Project would not generate noise in violation of the City of Oakland Noise Ordinance. (Criterion 4) *(Less than Significant with SCAs)* | **SCA NOI-6: Operational Noise** (Standard Condition of Approval 68)<br>**Requirement:** Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City. | Less Than Significant |
| **Impact NOI-3:** The Project would not generate noise that would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project. (Criterion 5) *(Less than Significant)* | None required | Less Than Significant |
| **Impact NOI-4:** The Project would not be inconsistent with the land use compatibility guidelines of the Oakland General Plan for the proposed land uses. (Criterion 7) *(Less than Significant)* | None required | Less Than Significant |
| **Impact NOI-5:** Project construction would not expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration. (Criterion 9) *(Less than Significant with SCAs)* | **SCA NOI-7: Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities.** *(Standard Condition of Approval 70)*<br>**Requirement:** The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located adjacent to Elmwood Avenue. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction. | Less Than Significant |
| **Impact NOI-1.CU:** Construction and operational activities associated with the Project would not result in a cumulatively considerable increase in emissions for which the SFBAAB is in non-attainment under an applicable federal or state ambient air quality standard. (Criteria 1, 2, 3 and 4) *(Less than Significant with SCAs)* | **SCA NOI-1: Construction Days/Hours.** See above.<br>**SCA NOI-2: Construction Noise.** See above.<br>**SCA NOI-3: Extreme Construction Noise.** See above.<br>**SCA NOI-4: Project-Specific Construction Noise Reduction Measures.** See above.<br>**SCA NOI-5: Construction Noise Complaints.** See above.<br>**SCA NOI-6: Operational Noise.** See above.<br>**SCA NOI-7: Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities.** See above. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.6, *Transportation and Circulation*** | | |
| **Impact TRANS-1:** The Project would not cause substantial additional VMT per worker. (Criterion 1) *(Less than Significant)* | None required | Less Than Significant |
| **Impact TRANS-2:** The Project would not conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths. (Criterion 2) *(Less than Significant with SCAs)* | **SCA TRANS-3: Transportation and Parking Demand Management** *(Standard Condition of Approval 78)*<br>***a. Transportation and Parking Demand Management (TDM) Plan Required***<br>**Requirement:** The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City.<br>i. The goals of the TDM Plan shall be the following:<br>• Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable.<br>• Achieve the following project vehicle trip reductions (VTR):<br>– Projects generating 50 to 99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR<br>– Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR<br>• Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate.<br>• Enhance the City's transportation system, consistent with City policies and programs.<br>ii. The TDM Plan should include the following:<br>• Baseline existing conditions of parking and curbside regulations within the surrounding neighborhood that could affect the effectiveness of TDM strategies, including inventory of parking spaces and occupancy if applicable.<br>• Proposed TDM strategies to achieve VTR goals (see below).<br>iii. For employers with 100 or more employees at the subject site, the TDM Plan shall also comply with the requirements of Oakland Municipal Code Chapter 10.68 Employer-Based Trip Reduction Program.<br>iv. The following TDM strategies must be incorporated into a TDM Plan based on a project location or other characteristics. When required, these mandatory strategies should be identified as a credit toward a project's VTR. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

<table>
<tr><th>Impacts, Criterion, and Significance</th><th>Standard Conditions of Approval and Mitigation Measures</th><th>Significance after Incorporation of Standard Conditions of Approval and Mitigation</th></tr>
<tr><td colspan="3">EIR Section 4.6, Transportation and Circulation (continued)</td></tr>
<tr><td>Impact TRANS-2 (cont.)</td><td>
<table>
<tr><th>Improvement</th><th>Required by code or when …</th></tr>
<tr><td>Bus boarding bulbs or islands</td><td>• A bus boarding bulb or island does not already exist, and a bus stop is located along the project frontage; and/or<br>• A bus stop along the project frontage serves a route with 15 minutes or better peak hour service and has a shared bus-bike lane curb</td></tr>
<tr><td>Bus shelter</td><td>• A stop with no shelter is located within the project frontage; or<br>• The project is located within 0.10 miles of a flag stop with 25 or more boardings per day</td></tr>
<tr><td>Concrete bus pad</td><td>• A bus stop is located along the project frontage and a concrete bus pad does not already exist</td></tr>
<tr><td>Curb extensions or bulb-outs</td><td>• Identified as an improvement within site analysis</td></tr>
<tr><td>Implementation of a corridor-level bikeway improvement</td><td>• A buffered Class II or Class IV bikeway facility is in a local or county adopted plan within 0.10 miles of the project location; and<br>• The project would generate 500 or more daily bicycle trips</td></tr>
<tr><td>Implementation of a corridor-level transit capital improvement</td><td>• A high-quality transit facility is in a local or county adopted plan within 0.25 miles of the project location; and<br>• The project would generate 400 or more peak period transit trips</td></tr>
<tr><td>Installation of amenities such as lighting; pedestrian-oriented green infrastructure, trees, or other greening landscape; and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.</td><td>• Always required</td></tr>
<tr><td>Installation of safety improvements identified in the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.)</td><td>• When improvements are identified in the Pedestrian Master Plan along project frontage or at an adjacent intersection</td></tr>
</table>
</td><td></td></tr>
</table>

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

<table>
<tr><th>Impacts, Criterion, and Significance</th><th>Standard Conditions of Approval and Mitigation Measures</th><th>Significance after Incorporation of Standard Conditions of Approval and Mitigation</th></tr>
<tr><td colspan="3">EIR Section 4.6, Transportation and Circulation (continued)</td></tr>
<tr><td>Impact TRANS-2 (cont.)</td><td>
<table>
<tr><th>Improvement</th><th>Required by code or when …</th></tr>
<tr><td>In-street bicycle corral</td><td>• A project includes more than 10,000 square feet of ground floor retail, is located along a Tier 1 bikeway, and on-street vehicle parking is provided along the project frontages.</td></tr>
<tr><td>Intersection improvements[4]</td><td>• Identified as an improvement within site analysis</td></tr>
<tr><td>New sidewalk, curb ramps, curb and gutter meeting current City and ADA standards</td><td>• Always required</td></tr>
<tr><td>No monthly permits and establish minimum price floor for public parking[5]</td><td>• If proposed parking ratio exceeds 1:1000 sf. (commercial)</td></tr>
<tr><td>Parking garage is designed with retrofit capability</td><td>• Optional if proposed parking ratio exceeds 1:1.25 (residential) or 1:1000 sf. (commercial)</td></tr>
<tr><td>Parking space reserved for car share</td><td>• If a project is providing parking and a project is located within downtown. One car share space reserved for buildings between 50 – 200 units, then one car share space per 200 units.</td></tr>
<tr><td>Paving, lane striping or restriping (vehicle and bicycle), and signs to midpoint of street section</td><td>• Typically required</td></tr>
<tr><td>Pedestrian crossing improvements</td><td>• Identified as an improvement within site analysis</td></tr>
<tr><td>Pedestrian-supportive signal changes[6]</td><td>• Identified as an improvement within operations analysis</td></tr>
<tr><td>Real-time transit information system</td><td>• A project frontage block includes a bus stop or BART station and is along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better</td></tr>
<tr><td>Relocating bus stops to far side</td><td>• A project is located within 0.10 mile of any active bus stop that is currently near-side</td></tr>
</table>
</td><td></td></tr>
</table>

[4] Including but not limited to visibility improvements, shortening corner radii, pedestrian safety islands, accounting for pedestrian desire lines.
[5] May also provide a cash incentive or transit pass alternative to a free parking space in commercial properties.
[6] Including but not limited to reducing signal cycle lengths to less than 90 seconds to avoid pedestrian crossings against the signal, providing a leading pedestrian interval, provide a "scramble" signal phase where appropriate.

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

<table>
<tr><th>Impacts, Criterion, and Significance</th><th>Standard Conditions of Approval and Mitigation Measures</th><th>Significance after Incorporation of Standard Conditions of Approval and Mitigation</th></tr>
<tr><td colspan="3">EIR Section 4.6, Transportation and Circulation (continued)</td></tr>
<tr><td>Impact TRANS-2 (cont.)</td><td>
<table>
<tr><th>Improvement</th><th>Required by code or when …</th></tr>
<tr><td>Signal upgrades[7]</td><td>• Project size exceeds 100 residential units, 80,000 sf. of retail, or 100,000 sf. of commercial; and<br>• Project frontage abuts an intersection with signal infrastructure older than 15 years</td></tr>
<tr><td>Transit queue jumps</td><td>• Identified as a needed improvement within operations analysis of a project with frontage along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better</td></tr>
<tr><td>Trenching and placement of conduit for providing traffic signal interconnect</td><td>• Project size exceeds 100 units, 80,000 sf. of retail, or 100,000 sf. of commercial; and<br>• Project frontage block is identified for signal interconnect improvements as part of a planned ITS improvement; and<br>• A major transit improvement is identified within operations analysis requiring traffic signal interconnect</td></tr>
<tr><td>Unbundled parking</td><td>• If proposed parking ratio exceeds 1:1.25 (residential)</td></tr>
</table>
v. Other TDM strategies to consider include, but are not limited to, the following:<br>
• Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement.<br>
• Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping.<br>
• Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project.
</td><td></td></tr>
</table>

[7] Including typical traffic lights, pedestrian signals, bike actuated signals, transit-only signals

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.6, *Transportation and Circulation* (continued)** | | |
| **Impact TRANS-2** (cont.) | • Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan, the Master Street Tree List and Tree Planting Guidelines (which can be viewed at http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak042662.pdf and http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oak025595.pdf, respectively) and any applicable streetscape plan.<br>• Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements.<br>• Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency).<br>• Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes.<br>• Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: (1) Contribution to AC Transit bus service; (2) Contribution to an existing area shuttle service; and (3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3).<br>• Guaranteed ride home program for employees, either through 511.org or through separate program.<br>• Pre-tax commuter benefits (commuter checks) for employees.<br>• Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants.<br>• On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools.<br>• Distribution of information concerning alternative transportation options.<br>• Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties.<br>• Parking management strategies including attendant/valet parking and shared parking spaces.<br>• Requiring tenants to provide opportunities and the ability to work off-site.<br>• Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week).<br>• Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **EIR Section 4.6, *Transportation and Circulation* (continued)** | | |
| **Impact TRANS-2** (cont.) | The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.<br>***b. TDM Implementation – Physical Improvements***<br>**Requirement:** For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project.<br>***c. TDM Implementation – Operational Strategies***<br>**Requirement:** For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved. | |
| **Impact TRANS-3:** The Project would not substantially induce additional automobile travel by increasing physical roadway capacity in congested areas i.e., adding new mixed-flow lanes or adding new roadways to the network. (Criterion 3) (*Less than Significant*) | None required | Less Than Significant |
| **Impact TRANS-1.CU:** The Project, combined with cumulative development in the Project vicinity, would not result in a cumulatively considerable transportation impact. (Criteria 1, 2, and 3) (*Less than Significant with SCAs*) | **SCA TRANS-3: Transportation and Parking Demand Management.** See above. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.2, *Aesthetics, Shadow, and Wind*** | | |
| **Impact AES-1:** The Project would not have a substantial adverse effect on a public scenic vista or substantially damage scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings, located within a state or locally designated scenic highway (Criterion 1 and 2). *(Less than Significant)* | None required | Less Than Significant |
| **Impact AES-2:** The Project would not substantially degrade the existing visual character or quality of the site and its surroundings (Criterion 3). *(Less than significant with SCAs)* | **SCA AES-1: Trash and Blight Removal** *(Standard Condition of Approval 16)*<br>**Requirement:** The project applicant and his/her successors shall maintain the property free of blight, as defined in chapter 8.24 of the Oakland Municipal Code. For nonresidential and multi-family residential projects, the project applicant shall install and maintain trash receptacles near public entryways as needed to provide sufficient capacity for building users.<br>**SCA AES-2: Graffiti Control** *(Standard Condition of Approval 17)*<br>**Requirement:**<br>a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation:<br>i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces.<br>ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces.<br>iii. Use of paint with anti-graffiti coating.<br>iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).<br>v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.<br>b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:<br>i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.2, *Aesthetics, Shadow, and Wind* (continued)** | | |
| **Impact AES-2** (cont.) | ii. Covering with new paint to match the color of the surrounding surface.<br>iii. Replacing with new surfacing (with City permits if required)<br>**SCA AES-3: Landscape Plan** *(Standard Condition of Approval 18)*<br>***a. Landscape Plan Required***<br>**Requirement:** The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. Proposed plants shall be predominantly drought-tolerant. Specification of any street trees shall comply with the Master Street Tree List and Tree Planting Guidelines (which can be viewed at http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak042662.pdf and http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oak025595.pdf, respectively), and with any applicable streetscape plan.<br>***b. Landscape Installation***<br>**Requirement:** The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of $2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid.<br>***c. Landscape Maintenance***<br>**Requirement:** All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced. | |
| **Impact AES-3:** The Project would not create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area (Criterion 4). *(Less than significant with SCAs)* | **SCA AES-4: Lighting** (Standard Condition of Approval 19)<br>**Requirement:** Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.2, *Aesthetics, Shadow, and Wind* (continued)** | | |
| **Impact AES-4:** The Project would not cast shadow that substantially impairs a nearby use reliant on sunlight, including the following functions: a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors; the beneficial use of any public or quasi-public open space; a historic resource; or result in an exception to the policies in the General Plan, Planning Code, or Uniform Building Code, and the exception causes there to be a fundamental conflict with policies and regulations addressing the provision of adequate light related to appropriate uses (Criterion 5, 6, 7, 8, and 9). *(Less than significant)* | None required | Less Than Significant |
| **Impact AES-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative aesthetic impacts. *(Less than Significant with SCAs)* | **SCA AES-1: Trash and Blight Removal.** See above.<br>**SCA AES-2: Graffiti Control.** See above.<br>**SCA AES-3: Landscape Plan.** See above.<br>**SCA AES-4: Lighting.** See above. | Less Than Significant |
| **Effects Found Not to Be Significant Section 4.7.4, *Cultural Resources*** | | |
| **Impact CUL-1:** The Project would not cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5. (Criterion 1) *(Less than Significant)* | None required | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.4, *Cultural Resources* (continued)** | | |
| **Impact CUL-2:** The Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. (Criterion 2) *(Less than Significant with SCAs)* | **SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** (*Standard Condition of Approval 32*)<br><br>**Requirement:** Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented.<br><br>In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense.<br><br>In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant. | Less Than Significant |
| **Impact CUL-3:** The Project would not disturb any human remains, including those interred outside of formal cemeteries. (Criterion 3) *(Less than Significant with SCAs)* | **SCA CUL-2: Human Remains – Discovery During Construction.** (*Standard Condition of Approval 34*)<br><br>**Requirement:** Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.4, *Cultural Resources* (continued)** | | |
| **Impact CUL-1.CU:** The Project, combined with cumulative development in the project vicinity and citywide, would not contribute to cumulative adverse impacts on historical resources. *(Less than Significant)* | None required | Less Than Significant |
| **Impact CUL-2.CU:** The Project, combined with cumulative development in the project vicinity and citywide, would not contribute to cumulative adverse impacts on archaeological resources and human remains. *(Less than Significant with SCAs)* | **SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** See above.<br>**SCA CUL-2: Human Remains – Discovery During Construction.** See above. | Less Than Significant |
| **Effects Found Not to Be Significant Section 4.7.5, *Energy*** | | |
| **Impact ENE-1:** Construction and operation of the Project would not result in potentially significant environmental impact due to the wasteful, inefficient, and/ or unnecessary use of energy, and adequate capacity would be available to serve the Project's demand. (Criteria 1 and 4) (*Less than Significant with SCAs*) | **SCA AIR-2: Criteria Air Pollutant Controls – Construction Related.** See Air Quality above.<br>**SCA GHG-1: SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan.** See Greenhouse Gas Emissions above.<br>**SCA TRANS-2: Bicycle Parking.** See Greenhouse Gas Emissions above.<br>**SCA TRANS-3: Transportation and Parking Demand Management.** See Transportation and Circulation above.<br>**SCA TRANS-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure.** See Greenhouse Gas Emissions above.<br>**SCA UTIL-3: Green Building Requirements.** See Utilities and Service Systems below. | Less Than Significant |
| **Impact ENE-2: The** Project would not conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards. (Criteria 2 and 3) *(Less than Significant with SCAs)* | **SCA GHG-1: SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan.** See Greenhouse Gas Emissions above.<br>**SCA UTIL-3: Green Building Requirements.** See Utilities and Service Systems below. | Less Than Significant |
| **Impact ENE-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative energy impacts. *(Less than Significant with SCAs)* | **SCA AIR-2: Criteria Air Pollutant Controls – Construction Related.** See Air Quality above.<br>**SCA GHG-1: SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan.** See Greenhouse Gas Emissions above.<br>**SCA TRANS-2: Bicycle Parking.** See Greenhouse Gas Emissions above.<br>**SCA TRANS-3: Transportation and Parking Demand Management.** See Transportation and Circulation above. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.5, *Energy (continued)*** | | |
| **Impact ENE-1.CU** (cont.) | **SCA TRANS-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure.** See Greenhouse Gas Emissions above.<br>**SCA UTIL-3: Green Building Requirements.** See Utilities and Service Systems below. | |
| **Effects Found Not to Be Significant Section 4.7.6, *Geology, Soils, and Paleontological Resources*** | | |
| **Impact GEO-1:** The Project would not expose people or structures to substantial risk of loss, injury, or death involving seismic hazards such as ground shaking and seismic-related ground failure such as liquefaction, differential settlement, collapse, or lateral spreading. (Criteria 1.b and 1.c) *(Less than Significant with SCAs)* | **SCA GEO-1: Construction-Related Permit(s).** *(Standard Condition of Approval 36)*<br>**Requirement:** The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.<br>**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** *(Standard Condition of Approval 39)*<br>**Requirement:** The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 177 (As amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction. | Less Than Significant |
| **Impact GEO-2:** The Project would not result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways. (Criterion 2) *(Less than Significant with SCAs)* | **SCA HYD-1: State Construction General Permit.** See Hydrology and Water Quality below.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Hydrology and Water Quality below.<br>**SCA UTIL-5: Storm Drain System.** See Utilities and Service Systems below. | Less Than Significant |
| **Impact GEO-3:** The Project would not be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code or corrosive soil, creating substantial risks to life or property. (Criterion 3) *(Less than Significant with SCAs)* | **SCA GEO-1: Construction-Related Permit(s).** See above.<br>**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** See above. | Less Than Significant |
| **Impact GEO-4:** The Project would not be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property. (Criterion 4) *(Less than Significant with SCAs)* | **SCA GEO-1: Construction-Related Permit(s).** See above.<br>**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** See above.<br>**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Hazards and Hazardous Materials above. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.6, *Geology, Soils, and Paleontological Resources* (continued)** | | |
| **Impact GEO-5:** The Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Criterion 7) *(Less than Significant with SCAs)* | **SCA CUL-1: Archeological and Paleontological Resources – Discovery During Construction.** See Cultural Resources above. | Less Than Significant |
| **Impact GEO-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts to geology, soils, seismicity, or paleontology. *(Less than Significant with SCAs)* | **SCA GEO-1: Construction-Related Permit(s).** See above.<br>**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** See above.<br>**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Hazards and Hazardous Materials above.<br>**SCA HYD-1: State Construction General Permit.** See Hydrology and Water Quality below.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Hydrology and Water Quality below.<br>**SCA UTIL-5: Storm Drain System.** See Utilities and Service Systems below.<br>**SCA CUL-1: Archeological and Paleontological Resources – Discovery During Construction.** See Cultural Resources above. | Less Than Significant |
| **Effects Found Not to Be Significant Section 4.7.7, *Hydrology and Water Quality*** | | |
| **Impact HYD-1:** The Project would not violate water quality standards; substantially alter the existing drainage pattern of the site that would result in erosion, siltation, or flooding on- or offsite that could affect receiving water quality; otherwise substantially degrade water quality; or fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16). (Criteria 1, 3, 7, 12, and 13) (*Less than Significant with SCAs*) | **SCA HYD-1: State Construction General Permit** *(Standard Condition of Approval 50)*<br>**Requirement:** The project applicant shall comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (SWRCB). The project applicant shall submit a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and other required Permit Registration Documents to SWRCB. The project applicant shall submit evidence of compliance with Permit requirements to the City.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects** *(Standard Condition of Approval 54)*<br>***a. Post-Construction Stormwater Management Plan Required***<br>**Requirement:** The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following:<br>i. Location and size of new and replaced impervious surface;<br>ii. Directional surface flow of stormwater runoff;<br>iii. Location of proposed on-site storm drain lines; | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.7, *Hydrology and Water Quality* (continued)** | | |
| **Impact HYD-1** (cont.) | iv. Site design measures to reduce the amount of impervious surface area;<br>v. Source control measures to limit stormwater pollution;<br>vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and<br>vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff.<br>***b. Maintenance Agreement Required***<br>**Requirement:** The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following:<br>i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and<br>ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary.<br>The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.<br>**SCA HYD-3: Vegetation Management on Creekside Properties.** *(Standard Condition of Approval 57)*<br>**Requirement:** The project applicant shall comply with the following requirements when managing vegetation prior to, during, and after construction of the project:<br>a. Identify and leave "islands" of vegetation in order to prevent erosion and landslides and protect habitat;<br>b. Trim tree branches from the ground up (limbing up) and leave tree canopy intact;<br>c. Leave stumps and roots from cut down trees to prevent erosion;<br>d. Plant fire-appropriate, drought-tolerant, preferably native vegetation;<br>e. Provide erosion and sediment control protection if cutting vegetation on a steep slope;<br>f. Fence off sensitive plant habitats and creek areas if implementing goat grazing for vegetation management;<br>g. Obtain a Tree Permit before removing a Protected Tree (any tree 9 inches diameter at breast height or dbh or greater and any oak tree 4 inches dbh or greater, except eucalyptus and Monterey pine);<br>h. Do not clear-cut vegetation. This can lead to erosion and severe water quality problems and destroy important habitat; | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.7, *Hydrology and Water Quality* (continued)** | | |
| **Impact HYD-1** (cont.) | i. Do not remove vegetation within 20 feet of the top of the creek bank. If the top of bank cannot be identified, do not cut within 50 feet of the centerline of the creek or as wide a buffer as possible between the creek centerline and the development;<br>j. Do not trim/prune branches that are larger than 4 inches in diameter;<br>k. Do not remove tree canopy;<br>l. Do not dump cut vegetation in the creek;<br>m. Do not cut tall shrubbery to less than 3 feet high; and<br>n. Do not cut short vegetation (e.g., grasses, ground-cover) to less than 6 inches high.<br>**SCA HYD-4: Creek Protection Plan.** *(Standard Condition of Approval 58)*<br>***a. Creek Protection Plan Required***<br>**Requirement:** The project applicant shall submit a Creek Protection Plan for review and approval by the City. The Plan shall be included with the set of project drawings submitted to the City for site improvements and shall incorporate the contents required under section 13.16.150 of the Oakland Municipal Code including Best Management Practices ("BMPs") during construction and after construction to protect the creek. Required BMPs are identified below in sections (b), (c), and (d).<br>***b. Construction BMPs***<br>**Requirement:** The Creek Protection Plan shall incorporate all applicable erosion, sedimentation, debris, and pollution control BMPs to protect the creek during construction. The measures shall include, but are not limited to, the following:<br>i. On sloped properties, the downhill end of the construction area must be protected with silt fencing (such as sandbags, filter fabric, silt curtains, etc.) and hay bales oriented parallel to the contours of the slope (at a constant elevation) to prevent erosion into the creek.<br>ii. The project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent biodegradable erosion control fabric shall be installed on all graded slopes to protect and stabilize the slopes during construction and before permanent vegetation gets established. All graded areas shall be temporarily protected from erosion by seeding with fast growing annual species. All bare slopes must be covered with staked tarps when rain is occurring or is expected.<br>iii. Minimize the removal of natural vegetation or ground cover from the site in order to minimize the potential for erosion and sedimentation problems. Maximize the replanting of the area with native vegetation as soon as possible.<br>iv. All work in or near creek channels must be performed with hand tools and by a minimum number of people. Immediately upon completion of this work, soil must be repacked and native vegetation planted.<br>v. Install filter materials (such as sandbags, filter fabric, etc.) acceptable to the City at the storm drain inlets nearest to the project site prior to the start of the wet weather season (October 15); site dewatering activities; street washing activities; saw cutting asphalt or concrete; and in order to retain any debris flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.7, *Hydrology and Water Quality* (continued)** | | |
| **Impact HYD-1** (cont.) | vi. Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.<br>vii. Direct and locate tool and equipment cleaning so that wash water does not discharge into the creek.<br>viii. Create a contained and covered area on the site for storage of bags of cement, paints, flammables, oils, fertilizers, pesticides, or any other materials used on the project site that have the potential for being discharged to the creek or storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.<br>ix. Gather all construction debris on a regular basis and place it in a dumpster or other container which is emptied or removed at least on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.<br>x. Remove all dirt, gravel, refuse, and green waste from the sidewalk, street pavement, and storm drain system adjoining the project site. During wet weather, avoid driving vehicles off paved areas and other outdoor work.<br>xi. Broom sweep the street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall be scraped from these areas before sweeping. At the end of each workday, the entire site must be cleaned and secured against potential erosion, dumping, or discharge to the creek, street, gutter, or storm drains.<br>xii. All erosion and sedimentation control measures implemented during construction activities, as well as construction site and materials management shall be in strict accordance with the control standards listed in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Control Board (RWQCB).<br>xiii. Temporary fencing is required for sites without existing fencing between the creek and the construction site and shall be placed along the side adjacent to construction (or both sides of the creek if applicable) at the maximum practical distance from the creek centerline. This area shall not be disturbed during construction without prior approval of the City.<br>***c. Post-Construction BMPs***<br>**Requirement:** The project shall not result in a substantial increase in stormwater runoff volume or velocity to the creek or storm drains. The Creek Protection Plan shall include site design measures to reduce the amount of impervious surface to maximum extent practicable. New drain outfalls shall include energy dissipation to slow the velocity of the water at the point of outflow to maximize infiltration and minimize erosion.<br>***d. Creek Landscaping***<br>**Requirement:** The project applicant shall include final landscaping details for the site on the Creek Protection Plan, or on a Landscape Plan, for review and approval by the City. Landscaping information shall include a planting schedule, detailing plant types and locations, and a system to ensure adequate irrigation of plantings for at least one growing season. Plant and maintain only drought-tolerant plants on the site where appropriate as well as native and riparian plants in and adjacent to riparian corridors. Along the riparian corridor, native plants shall not be disturbed to the maximum extent feasible. Any areas disturbed along the riparian corridor shall be replanted with mature native riparian vegetation and be maintained to ensure survival. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.7, *Hydrology and Water Quality* (continued)** | | |
| **Impact HYD-1** (cont.) | ***e. Creek Protection Plan Implementation***<br>**Requirement:** The project applicant shall implement the approved Creek Protection Plan during and after construction. During construction, all erosion, sedimentation, debris, and pollution control measures shall be monitored regularly by the project applicant. The City may require that a qualified consultant (paid for by the project applicant) inspect the control measures and submit a written report of the adequacy of the control measures to the City. If measures are deemed inadequate, the project applicant shall develop and implement additional and more effective measures immediately.<br>**SCA UTIL-5: Storm Drain System.** See Utilities and Service Systems below. | |
| **Impact HYD-2:** The Project would not result in substantially depleted groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or lowering the local groundwater table. (Criterion 2) *(Less than Significant)* | None required | Less Than Significant |
| **Impact HYD-3:** The Project would not result in substantial flooding on- or off-site, create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems, or create or contribute substantial runoff which would be an additional source of polluted runoff. (Criteria 4, 5, and 6) (*Less than Significant with SCAs*) | **SCA HYD-1: State Construction General Permit.** See above.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See above.<br>**SCA HYD-4: Creek Protection Plan.** See above.<br>**SCA UTIL-5: Storm Drain System.** See Utilities and Service Systems below. | Less Than Significant |
| **Impact HYD-4:** The Project would not expose people or structures to a substantial risk of loss, injury, or death involving flooding. (Criteria 10, and 11) *(Less than Significant)* | None required | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.7, *Hydrology and Water Quality* (continued)** | | |
| **Impact HYD-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts on surface water or groundwater quality. *(Less than Significant with SCAs)* | **SCA HYD-1: State Construction General Permit.** See above.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See above.<br>**SCA HYD-3: Vegetation Management on Creekside Properties.** See above.<br>**SCA HYD-4: Creek Protection Plan.** See above.<br>**SCA UTIL-5: Storm Drain System.** See Utilities and Service Systems below. | Less Than Significant |
| **Effects Found Not to Be Significant Section 4.7.8, *Land Use and Planning*** | | |
| **Impact LUP-1:** The Project would not physically divide an established community. (Criterion 1) *(Less than Significant)* | None required | Less Than Significant |
| **Impact LUP-2:** The Project would not result in a fundamental conflict between adjacent or nearby land uses. (Criterion 2) *(Less than Significant)* | None required | Less Than Significant |
| **Impact LUP-3:** The Project would not fundamentally conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and result in a physical change in the environment. (Criterion 3) *(Less than Significant)* | None required | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.8, *Land Use and Planning* (continued)** | | |
| **Impact LUP-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact to land use and planning. *(Less than Significant)* | None required | Less Than Significant |
| **Effects Found Not to Be Significant Section 4.7.10, *Population and Housing*** | | |
| **Impact POP-1:** The Project would not induce substantial population growth in a manner not contemplated in the General Plan, either directly or indirectly, such that additional infrastructure is required. (Criterion 1) *(Less than Significant)* | **SCA POP-1: Jobs/Housing Impact Fee.** *(Standard Condition of Approval 71)*<br>**Requirement:** The project applicant shall comply with the requirements of the City of Oakland Jobs/Housing Impact Fee Ordinance (chapter 15.68 of the Oakland Municipal Code). | Less Than Significant |
| **Impact POP-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact to population and housing. *(Less than Significant)* | **SCA POP-1: Jobs/Housing Impact Fee.** See above. | Less Than Significant |
| **Effects Found Not to Be Significant Section 4.7.11, *Public Services*** | | |
| **Impact PUB-1:** The Project would not result in an increase in demand for fire protection and emergency medical response services that would require new or physically altered fire protection facilities to maintain acceptable service ratios, response times, or other performance objectives, construction of which could have significant physical environmental impacts. (Criterion 1.a) *(Less than Significant with SCAs)* | **SCA PUB-1: Capital Improvements Impact Fee.** *(Standard Condition of Approval 73)*<br>**Requirement:** The project applicant shall comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code). | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.11, *Public Services* (continued)** | | |
| **Impact PUB-2:** The Project would not result in an increase in demand for police services that would require new or physically altered police facilities to maintain acceptable service ratios, response times, or other performance objectives, construction of which could have significant physical environmental impacts. (Criterion 1.b) *(Less than Significant with SCAs)* | **SCA PUB-1: Capital Improvements Impact Fee.** See above. | Less Than Significant |
| **Impact PUB-3:** The Project would not result in an increase in new students for public schools at a level that would require new or physically altered school facilities to maintain acceptable service ratios or other performance objectives, construction of which would have significant physical environmental impacts. (Criterion 1.c) *(Less than Significant)* | None required | Less Than Significant |
| **Impact PUB-4:** The Project would not result in an increase in demand for other public facilities, including libraries, at a level that would require new or physically altered library facilities in order to maintain acceptable service ratios or other performance objectives, construction of which would have significant physical environmental impacts. (Criterion 1.d) *(Less than Significant with SCAs)* | **SCA PUB-1: Capital Improvements Impact Fee.** See above. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.11, *Public Services* (continued)** | | |
| **Impact PUB-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in an adverse cumulative increase in demand for public services that would require new or physically altered governmental facilities, construction of which could have significant physical environmental impacts. *(Less than Significant with SCAs)* | **SCA PUB-1: Capital Improvements Impact Fee.** See above. | Less Than Significant |
| **Effects Found Not to Be Significant Section 4.7.12, *Recreation*** | | |
| **Impact REC-1:** The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated or require the construction or expansion of recreational facilities which could have a substantial adverse physical effect on the environment. (Criteria 1 and 2) *(Less than Significant with SCAs)* | **SCA REC-1: Access to Parks and Open Space.** *(Standard Condition of Approval 74)*<br>**Requirement:** The project applicant shall submit a plan for City review and approval to enhance bicycle and pedestrian access from the project site and adjacent areas to Fruitvale Bridge Park. Examples of enhancements may include, but are not limited to, new or improved bikeways, bike parking, traffic control devices, sidewalks, pathways, bulb-outs, and signage. The project sponsor shall install the approved enhancements during construction and prior to completion of the project.<br>**SCA PUB-1: Capital Improvements Impact Fee.** See Public Services above. | Less Than Significant |
| **Impact REC-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts to recreation. *(Less than Significant with SCAs)* | **SCA REC-1: Access to Parks and Open Space.** See above.<br>**SCA PUB-1: Capital Improvements Impact Fee.** See Public Services above. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.13, *Tribal Cultural Resources*** | | |
| **Impact TRI-1:** The Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074. (Criterion 4) *(Less than Significant with SCAs)* | **SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** See Cultural Resources above.<br>**SCA CUL-2: Human Remains – Discovery During Construction.** See Cultural Resources above. | Less Than Significant |
| **Impact TRI-1.CU:** The Project, combined with cumulative development in the project vicinity and citywide, would not contribute to cumulative adverse impacts on archaeological resources, human remains, and tribal cultural resources. *(Less than Significant with SCAs)* | **SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** See Cultural Resources above.<br>**SCA CUL-2: Human Remains – Discovery During Construction.** See Cultural Resources above. | Less Than Significant |
| **Effects Found Not to Be Significant Section 4.7.14, *Utilities and Service Systems*** | | |
| **Impact UTIL-1:** The Project would not result in exceedance of EBMUD's wastewater discharge limitations or exceed the capacity of the existing wastewater treatment system, and would not result in a significant environmental effect related to the construction of new wastewater treatment facilities or expansion of existing facilities. (Criteria 1 and 4) *(Less than Significant with SCAs)* | **SCA UTIL-3: Green Building Requirements** *(Standard Condition of Approval 85)*<br>***a. Compliance with Green Building Requirements During Plan-Check***<br>**Requirement:** The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code).<br>i. The following information shall be submitted to the City for review and approval with the application for a building permit:<br>• Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards.<br>• Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit.<br>• Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit.<br>• Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below.<br>• Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance.<br>• Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.14, *Utilities and Service Systems* (continued)** | | |
| **Impact UTIL-1** (cont.) | • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.<br>ii. The set of plans in subsection (i) shall demonstrate compliance with the following:<br>• CALGreen mandatory measures.<br>• At least LEED Silver per the appropriate checklist approved during the Planning entitlement process.<br>• All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted.<br>• The required green building point minimums in the appropriate credit categories.<br>***b. Compliance with Green Building Requirements During Construction***<br>**Requirement:** The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project.<br>The following information shall be submitted to the City for review and approval:<br>i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit.<br>ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance.<br>iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.<br>***c. Compliance with Green Building Requirements After Construction***<br>**Requirement:** Prior to the finalizing the Building Permit, the Green Building Certifier shall submit the appropriate documentation to City staff and attain the minimum required point level.<br>**SCA UTIL-4: Sanitary Sewer System** *(Standard Condition of Approval 87)*<br>**Requirement:** The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system. | |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.14, *Utilities and Service Systems* (continued)** | | |
| **Impact UTIL-2:** The Project would not require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects. (Criterion 2) *(Less than Significant with SCAs)* | **SCA UTIL-5: Storm Drain System** *(Standard Condition of Approval 88)*<br>**Requirement:** The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.<br>**SCA HYD-1: Construction General Permit.** See Hydrology and Water Quality above.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Hydrology and Water Quality above. | Less Than Significant |
| **Impact UTIL-3:** The Project would not exceed water supplies available to serve the Project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects. (Criterion 3) *(Less than Significant with SCAs)* | **SCA UTIL-3: Green Building Requirements.** See above. | Less Than Significant |
| **Impact UTIL-4:** The Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs and would not require or result in construction of landfill facilities or expansion of existing facilities, and would not violate applicable federal, State, and local statutes or regulations related to solid waste. (Criteria 5 and 6) *(Less than Significant with SCAs)* | **SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** *(Standard Condition of Approval 82)*<br>**Requirement:** The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.<br>**SCA UTIL-2: Recycling Collection and Storage Space** *(Standard Condition of Approval 84)*<br>**Requirement:** The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two (2) cubic feet of storage and collection space per residential unit is required, with a minimum of ten (10) cubic feet. For nonresidential projects, at least two (2) cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten (10) cubic feet.<br>**SCA UTIL-3: Green Building Requirements.** See above. | Less Than Significant |

**TABLE 2-1 (CONTINUED)**
**SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, MITIGATION MEASURES, AND RESIDUAL IMPACTS**

| Impacts, Criterion, and Significance | Standard Conditions of Approval and Mitigation Measures | Significance after Incorporation of Standard Conditions of Approval and Mitigation |
|---|---|---|
| **Effects Found Not to Be Significant Section 4.7.14, *Utilities and Service Systems* (continued)** | | |
| **Impact UTIL-1.CU:** The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact on the capacity of EBMUD's wastewater systems or the City's stormwater drainage system; water supplies; or generation of solid waste. *(Less than Significant with SCAs)* | **SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** See above.<br>**SCA UTIL-2: Recycling Collection and Storage Space.** See above.<br>**SCA UTIL-3: Green Building Requirements.** See above.<br>**SCA UTIL-4: Sanitary Sewer System.** See above.<br>**SCA UTIL-5: Storm Drain System.** See above.<br>**SCA HYD-1: Construction General Permit.** See Hydrology and Water Quality above.<br>**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Hydrology and Water Quality above. | Less Than Significant |

This page intentionally left blank

# CHAPTER 3
# Project Description

This chapter describes all components and characteristics of the proposed 3600 Alameda Avenue Project (Project) proposed by Prologis (Project Applicant) and serves as a basis for the analysis that follows in subsequent chapters of this Draft EIR. This chapter provides an overview of existing conditions on and around the Project site, although existing conditions are described in greater detail in each environmental analysis section in Chapter 4. In addition to describing the Project and providing an overview of existing conditions, this chapter lists the Project Applicant's Project Objectives and the discretionary approvals required by the City of Oakland and various other agencies.

## 3.1 Project Location

The Project site is an approximately 23.9-acre parcel located at 3600 Alameda Avenue generally between Fruitvale Avenue to the west and 37th Avenue to the east in Oakland (**Figure 3-1**). The Project site is in the Central Estuary Area Plan's Central Estuary Industrial Zone-6 (D-CE-6) zoning district and has an Estuary Policy Plan (EPP) Heavy Industry General Plan land use designation (Assessor's Parcel Number [APN] 033 2250-011-04). The site is bordered by Alameda Avenue and the Oakland Estuary to the south; Fruitvale Avenue, commercial/industrial uses, and residential uses to the west; a building supply warehouse store (Home Depot) with associated surface parking to the east; and a mixed-use residential neighborhood and I-880 to the north.

## 3.2 Existing Site Conditions

### 3.2.1 Existing Project Site Uses

The Project site is predominantly flat and currently occupied by the former Owens-Brockway Glass manufacturing facility, which was used to manufacture glass containers from 1938 until the cessation of manufacturing operations in 2015. Multiple manufacturing structures, totaling approximately 1.24 million square feet, currently occupy the site.

The Project site is mostly covered by the existing structures and paving, with little existing vegetation. There is one tree in the Project site interior and several on-site trees at the existing facility entrance along Alameda Avenue. A row of street trees lines the east side of 37th Avenue and extends along the Project site boundary to Alameda Avenue.




2021\D2021009\22.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: ESA, 2022

3600 Alameda Industrial Project

**Figure 3-1**
Project Location

ESA

### 3.2.2 Existing Surrounding Uses

Existing surrounding uses are primarily industrial, commercial (e.g., retail, gym, and restaurants), and residential uses. Commercial uses (a roofing company) and residential housing occupy the area to the north, between the Project site and Interstate 880 (I-880). The southern portion of the Project site is bounded by Alameda Avenue and the Oakland Estuary's Tidal Canal (estuary) that separates the City of Oakland from the City of Alameda. East of the Project site, Alameda Avenue moves inland, and industrial uses occupy the area between Alameda Avenue and the waterfront. Directly east of the Project site, existing uses include the commercial building supply warehouse store (Home Depot) and fitness center (24-Hour Fitness), both surrounded by a parking lot. To the west, across Fruitvale Avenue, land uses are mostly light industrial and residential.

### 3.2.3 Existing General Plan Designations and Zoning

The General Plan land use designation for the Project site located at 3600 Alameda Avenue is Estuary Policy Plan Heavy Industrial (EPP HI). The EPP HI designation applies specifically to the former Owens-Brockway facility and describes the desired character of future development at the site be primarily heavy industrial uses. The maximum intensity allowed in the EPP HI-designated area is a floor area ratio (FAR) of 0.75 per parcel.

The zoning designation for the Project site is D-CE-6 (Central Estuary District Industrial Zone – 6). The intent of the D-CE-6 designation is to create, preserve, and enhance areas of the Central Estuary for a wide variety of businesses and related commercial and industrial establishments that may have the potential to generate off-site impacts (e.g., noise, light, odor, and traffic). This zoning designation allows for heavy industrial and manufacturing uses, transportation facilities, warehousing and distribution, and similar related uses all of which are consistent with this Project. Maximum intensity allowed in the D-CE-6 -designated area is FAR of 2.0 per parcel.

## 3.3 Project Characteristics

### 3.3.1 Project Program

The Project Applicant is proposing to demolish all existing structures on the Project site and construct an approximately 430,000 square foot, 56-foot-tall industrial building with a FAR of approximately 0.42 (see **Figure 3-2**).[1] The Project Applicant proposes the Project on a speculative basis as the end user and nature of the use is unknown at this time. For the purposes of the conservative analyses presented in Chapter 4 of this document, the end use is assumed to be a distribution warehouse.

[1] The analysis presented in this Draft EIR assumes an approximately 430,000 square foot project building. Since the time of Draft EIR development, the Project Applicant has since put forth a revised proposal for an approximately 424,320 square foot project building. Therefore, this Draft EIR describes a modestly larger structure and thus serves as a conservative analysis.




2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: HPA Architecture, 2023

3600 Alameda Industrial Project

**Figure 3-2**
Project Site Plan

ESA

The Project would create a new connection of 37th Avenue with Alameda Avenue, and a realignment of Alameda Avenue. The Alameda Avenue realignment would result in widened sidewalks and a new bike path within the Bay Trail. The Project would re-open Boehmer Street to create a new connection between 36th and 37th Avenues. It would also include a new driveway at the northwest corner of the site onto Fruitvale Avenue at its intersection with East 7th Street (see Section 3.3.3 below).

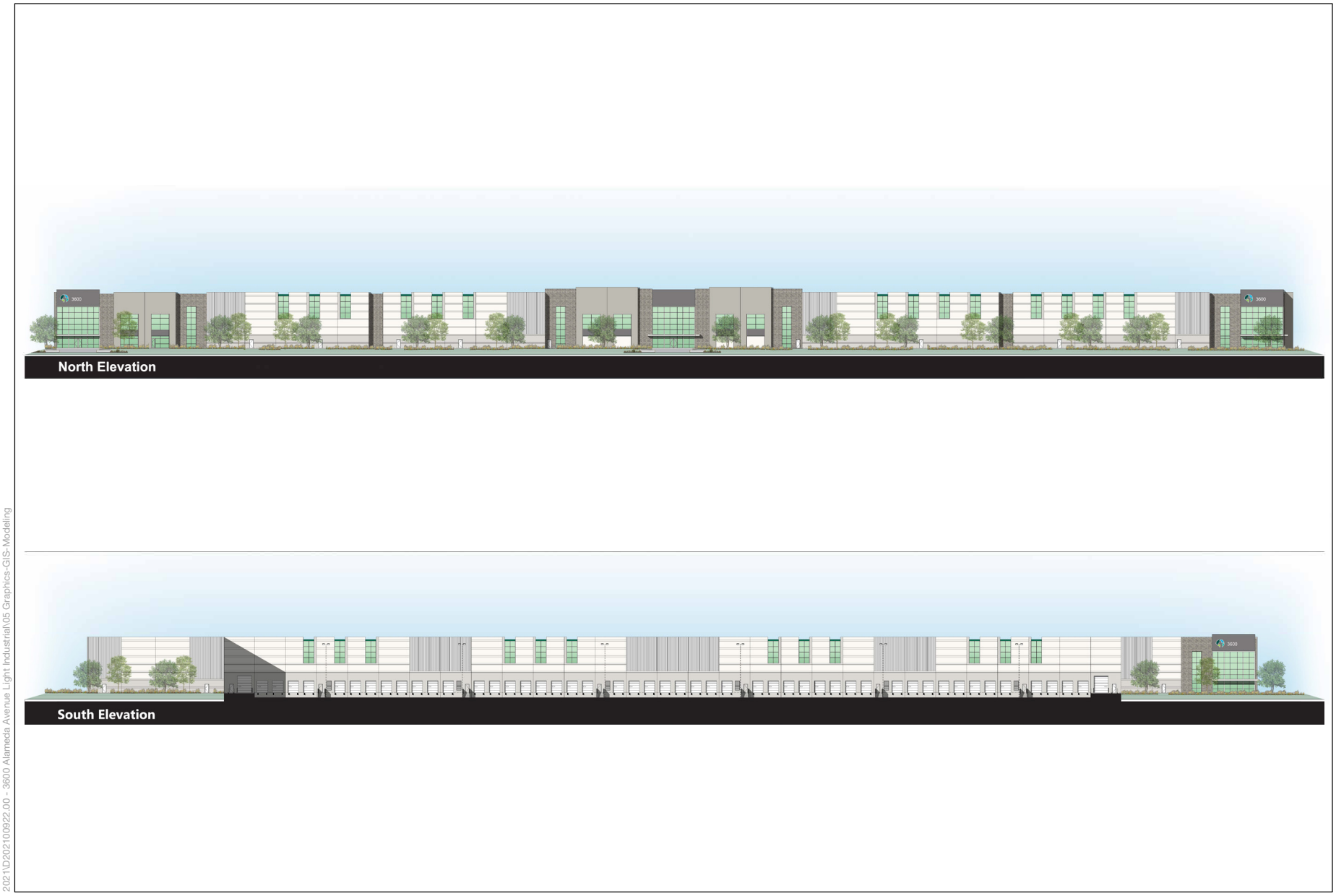
The main distribution warehouse building entrance and employee amenity space would be located at the northwest corner of the building fronting onto Fruitvale Avenue. The new facility would include up to 30,000 square feet of accessory office space, 25,000 square feet of which would be split between the northwest corner of the building at the main entrance, the central-northern portion of the building, and the northeastern corner of the building, depending on the number of tenants occupying the building. An additional 5,000 square feet of accessory office space would be provided at a mezzanine level. In addition, the Project would include an employee parking lot to the north and east of the building as well as loading docks and associated trailer parking areas in the southern portion of the Project site. An approximately one-acre portion of the site at the southeast corner at the intersection of Alameda Avenue and the proposed extension of 37th Avenue, would remain open to provide for a possible future development as retail use or a restaurant. For the purposes of the analyses presented in Chapter 4 of this document, Project operations is assumed to include an approximately 10,000 square-foot café/restaurant at that location. See **Figure 3-3** and **Figure 3-4**.

## 3.3.2 Open Space and Landscaping

An employee parking lot on the north side of the proposed building and a 20-foot-wide landscaping area would result in an overall 91-foot buffer between the proposed building and the northern Project site boundary. The land dedicated to the City for a potential future East 7th Street extension would provide an additional buffer between the proposed project building and the residential uses to the north. West of the proposed industrial building, along Fruitvale Avenue, the Project would include a landscaped strip. The main building entrance at the northwest corner of the building along Fruitvale Avenue would include an employee amenity area providing outdoor furniture, lighting, and seating to be utilized during breaks and lunchtimes. Additional seating would be provided in a landscaped area at the southeast corner of the building. Publicly accessible art would be located along the Project frontage.

## 3.3.3 Access, Parking, and Circulation

Automobile access would be provided via five driveways. The driveway onto Fruitvale Avenue at its intersection with East 7th Street, and the driveway at the intersection of 36th Avenue and Boehmer Street, would be limited to passenger vehicles. There would be two driveways on 37th Avenue, the northmost of which would also be limited to passenger vehicles. There would be one driveway on Alameda Avenue near the center of the Project site. Trucks would access the site via the south driveway on 37th Avenue and the driveway on Alameda Avenue.



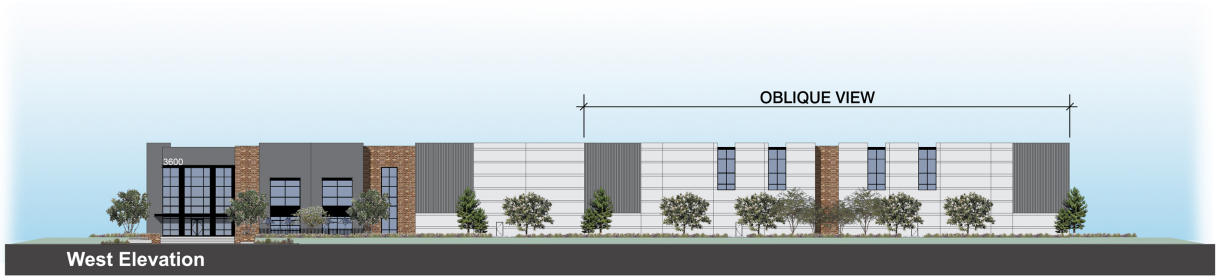

2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

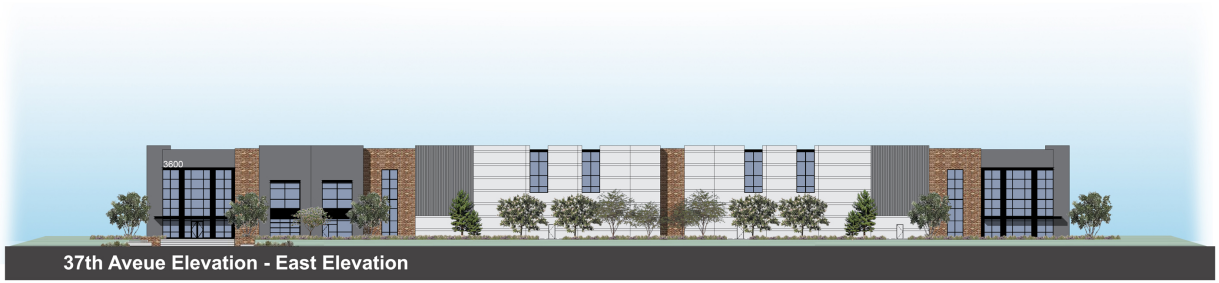
SOURCE: HPA Architecture, 2023

3600 Alameda Industrial Project

**Figure 3-3**
Project Elevations

ESA




2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: HPA Architecture, 2022

3600 Alameda Industrial Project

**Figure 3-4**
Project Elevations

ESA

The Project would re-open Boehmer Street, which is currently closed and gated, to create a new connection between 36th and 37th Avenues. The Project Applicant is proposing to dedicate the right-of-way on 37th Avenue to the City and extend 37th Avenue, which is currently a cul-de-sac, through to Alameda Avenue. This extension would implement a new intersection at Alameda Avenue and 37th Avenue and provide a new north-south connection. These changes to the street network were envisioned in the Central Estuary Plan (CEAP) *Policy Connection G* that call for a connection from the southeastern end of 37th Avenue to Alameda Avenue.

The Project Applicant is also proposing to dedicate rights-of-way for East 7th Street to the City for a potential future east-west street network connection. The Project, as originally proposed, included development of this new east-west network connection between Fruitvale Avenue and 37th Avenue. However, at the time this Draft EIR is published, it is not feasible to establish an intersection at East 7th Street and Fruitvale Avenue since the intersection would trigger upgrades to the Union Pacific Rail Road (UPRR) line, which would require a taking of private property rights from an adjacent property on East 7th Street. Therefore, this Draft EIR analyzes the driveway-only connection to Fruitvale Avenue as an interim state and as depicted in Figure 3-2. The potential future extension of East 7$^{th}$ Street west of Fruitvale Avenue is analyzed as a Project Variant (see Section 3.5, below). The Project proposes to re-construct all sidewalks surrounding the property, as well as modify the existing roadways around the Project site. The Project would shift Alameda Avenue approximately 100 feet inland to increase public access to the estuary shoreline and the Bay Trail. This realignment would result in new pedestrian sidewalks and bike facilities. The Project would also improve the Fruitvale Avenue pedestrian corridor by constructing a new sidewalk on the corner of East 7th Street and Fruitvale Avenue.

The Project would include an employee parking lot along the north and east sides of the building providing a total of 295 auto parking spaces. The auto parking spaces would be comprised of 140 standard spaces, 27 electric vehicle (EV) spaces, 118 spaces equipped for future electric charging stations (EV-capable spaces), 4 accessible car spaces, 1 EV accessible car space, 4 accessible van spaces, and 1 EV van space, and 1 EV ambulatory parking space. This equates to 10 percent EV spaces (30), and an additional 40 percent EV-capable spaces. The south side of the building would include a loading dock area with 48 dock doors and a parking lot accommodating 228 trailer stalls.

## 3.3.4 Utilities and Other Improvements

The Project would construct new water and sewer laterals that would connect to existing water and sewer lines in Alameda Avenue. Stormwater would be collected and treated on-site and routed to an existing storm drain line in Alameda Avenue. The Project would either underground electricity lines in compliance with the City's Standard Conditions of Approval or tie in to existing overhead electricity lines located along Alameda Avenue if undergrounding is prohibited.

The Project would result in new impervious surfaces and associated stormwater treatment requirements would apply to the entire site. Stormwater management-related site design measures would include directing roof runoff into vegetated areas; directing runoff from sidewalks, walkways, and/or patios onto vegetated areas; and directing runoff from driveways and/or

uncovered parking lots onto vegetated areas. The Project would implement source control measures to minimize sources of runoff pollution including measures to minimize run-on to and run-off from the loading area.

## 3.3.5 Hazardous Materials

The Project site is developed and has been disturbed with continuous heavy industrial use from 1938 to 2015. Since March 2021, the Project Applicant has performed environmental due diligence to characterize potential soil and groundwater contamination on the site and to address site remediation, including preparation of a Phase II site assessment. The Phase II environmental site assessment was conducted at the site between March and June of 2021 and determined that perchloroethylene (PCE) and trichloroethylene (TCE) were present in onsite soil vapor, as well as benzene which is the primary contaminant of concern in soil vapor at the site. In addition, benzene was detected in an onsite groundwater monitoring well. Furthermore, onsite soil samples indicated the presence of cadmium, arsenic, lead, chlorinated volatile organic compounds (VOCs), and total petroleum hydrocarbons gasoline (TPHg).

Polychlorinated biphenyls (PCBs) that resulted from an exploded transformer have been identified in concrete and soil in the basement area of two buildings on the Project site. The Project Applicant is working with the United States Environmental Protection Agency (U.S. EPA) to mitigate PCBs and has prepared a Polychlorinated Biphenyl Cleanup Plan (see Section 4.4, *Hazards and Hazardous Materials*).

The Project has been designed to minimize exposure to subsurface contamination by placing the new proposed building outside of the perimeter of the areas that have been identified as the most heavily contaminated. The most heavily contaminated areas would be used for trailer parking with a durable ground cover.

## 3.3.6 Sustainability

The Project would comply with the City of Oakland's Green Building Ordinance and the Project building is designed to be LEED certified. The Project would not provide a natural gas connection consistent with the City of Oakland's Municipal Code Chapter 15.37 requiring all-electric construction in newly constructed buildings. In addition, the Project would comply with the Plug-In Electric Vehicle (PEV) Charging Infrastructure requirements and would construct full circuit infrastructure for PEV charging stations for 10 percent of the total parking spaces and conduits for future expansion of PEV spaces for an additional 30 percent of the total parking space. Furthermore, the Project would plant a greater number of trees than it would remove, in accordance with the requirements of the City's Tree Preservation Ordinance.

## 3.3.7 Project Construction

Project construction would demolish all existing structures and surface parking lots. Construction activities would also include excavation and shoring, foundation and below-grade construction, and building construction including finishing interiors. Project construction is expected to commence in the first quarter of 2024 and occur over approximately 17 months.

The Project would include demolition of approximately 1,240,000 square feet of existing structures on the Project site, all of which would be reused onsite to fill existing voids and basements except for a small amount of stained concrete requiring approximately 5-10 truckloads of material to be removed due to staining. Approximately 4,800 cubic yards of soil and debris would be off-hauled and approximately 10,000 cubic yards of fill would be imported. Based on an Environmental Site Assessment and a Geotechnical Investigation Report prepared for the Project site, groundwater depth on the Project site is estimated to be approximately 8 to 15 feet below the current ground surface (see Section 4.4, *Hazards and Hazardous Materials*). Proposed grading would include cuts and fills of about 3 feet to accommodate a shallow foundation system.[2] Nonetheless, if groundwater is encountered during construction, dewatering would be required.

## 3.4 Project Objectives

The following objectives have been identified for the Project:

- Achieve increased economic benefit from the site.
- Create a modern warehouse that contributes to the aesthetics of the Project site.
- Facilitate the evolution of a transforming industrial workplace.
- Create a new efficient and updated warehouse which implements green building design and construction practices capable of achieving Leadership in Energy and Environmental Design (LEED™) certification for the industrial building within the Project.
- Encourage productive use of the City's industrial land which is currently underutilized.
- Support and retain existing industrial uses and employment in the City of Oakland's industrial sector.
- Receive ACDEH and EPA approval to remediate the environmental conditions to allow for safe usage of the site.
- Help achieve the goals of the Central Estuary Area Plan (CEAP) through creating network connections and maintaining industrial uses.
- Upgrade the Bay Trail network and its connection to points to the north and south.

## 3.5 Project Variant

As introduced in Section 3.3.3 above, the Project Applicant is proposing to dedicate rights-of-way for East 7th Street to the City for a potential future east-west street network connection. This Draft EIR analyzes the potential future east-west network connection as a variant to the Project that may or may not be included as part of the Project because the implementation is beyond the control of the Project Applicant at this time. A description of the Project Variant and why the implementation is uncertain at this time is described below and analyzed in Chapter 5.0, *Project Variant*.

[2] Kleinfelder, 2021. *Geotechnical Investigation Report Industrial Warehouse Site 3600 Alameda Avenue Oakland, California*, May 26, 2021.

Under the Project Variant, the City would accept the dedication and implement the extension of East 7th Street at a future date as feasible. Instead of a driveway-only connection from the Project site to Fruitvale Avenue, the Project Variant would extend East 7th Street by creating a new public right-of-way from its current terminus at Fruitvale Avenue east to 36th Avenue where it would connect with Boehmer Street. This would complete the east-west street network connection from Fruitvale Avenue through to 37th Avenue along the north side of the Project site resulting network connections surrounding the Project site. These changes to the street network were envisioned in the CEAP *Policy Connection C* that calls for a central connector between Fruitvale Avenue and 37th Avenue as well as *Policy Connection G* described above.[3]

# 3.6 Discretionary Actions and Other Planning Considerations

The Project requires several discretionary permits and approvals. As Lead Agency for the Project, the City of Oakland is responsible for the majority of approvals required for development, and for preparation of this Draft Focused EIR.

## 3.6.1 Actions by the City of Oakland

The City of Oakland approvals needed for the Project may include the following, without limitation:

- Bureau of Planning—Regular Design Review, CEQA determination, Tentative Parcel Map, Creek Protection Permit, Tree Permit
- Building Department—demolition permit, grading permit, approval of Post-Construction Stormwater Control Plan demonstrating compliance with Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) Municipal Regional Permit (MRP)
- Department of Transportation: other related off-site work permits (e.g., public right-of-way improvements, and tie backs) as well as encroachment permits
- All other necessary development permits and entitlements from the City

## 3.6.2 Actions by Other Agencies

In addition, the Project may rely on or require review and approval by several public agencies and jurisdictions that have authority over specific aspects of the Project. The approvals needed for the Project may include the following, without limitation:

- Bay Area Air Quality Management District (BAAQMD) – Issuance of permits for asbestos abatement activities, if any, and emergency generator.

[3] Note the CEAP Policy Connection C calls for a connection from the eastern end of Ford Street to the southwestern end of 37th Avenue. The connection would require right-of-way acquisition, which would run through the Project site. The alternate location along East 7th Street would achieve the Policy Connection goal of providing "a central connector between Fruitvale Avenue and 37th Avenue from which new development could be accessed if large-scale properties in the area were to develop in the future."

- Bay Conservation and Development Commission (BCDC) – Issuance of permit/approval for construction within 100 feet of the shoreline.
- California Regional Water Quality Control Board (RWQCB) – National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharge.
- East Bay Municipal Utility District (EBMUD) – Grant a Special Discharge Permit to discharge construction dewatering to the sanitary sewer and/or approval of new service requests and new water meter installations; Approval of water line, water hookups and review of water needs.
- United States Environmental Protection Agency (US EPA) – Acceptance of a PCB Cleanup Plan.
- Alameda County Department of Environmental Health (ACDEH) – Acceptance of a Corrective Action Implementation Plan and granting of required clearances to confirm that all applicable standards, regulations, and conditions for all previous contamination at the site have been met.

# CHAPTER 4
# Environmental Setting, Impacts, and Standard Conditions of Approval

## 4.0 Introduction to the Environmental Analysis

This chapter presents the environmental analysis of the Project, prepared in accordance with CEQA, as described in Chapter 1, *Introduction*, of this Draft EIR. This chapter consists of Sections 4.1 through 4.7, which present the technical analysis of each environmental topic or factor (e.g., Section 4.3, *Greenhouse Gas Emissions*) addressed in this document. This Section 4.0, *Introduction to the Environmental Analysis*, describes key environmental analysis terms used in this document and analysis, including the impact classifications, the organization of each technical section of this chapter, and the cumulative analysis approach and setting.

### 4.0.1 Scope of Analysis

As described in Chapter 1, *Introduction*, the City determined that an EIR is required for the Project for compliance with CEQA. As part of the preparation of the EIR, the City identified resource topics for which the physical environmental impacts of the Project would result in no impact or less-than-significant impacts, and that required City Standard Conditions of Approval (SCAs) would reduce significant impacts to a less-than-significant level. CEQA does not require further assessment of a project's less-than-significant impacts; therefore, those resource topics are included in a separate Section 4.7, *Effects Not Found to Be Significant*. The issues addressed in Section 4.7 are listed below:

- Section 4.7.1, Aesthetics, Shadow, and Wind
- Section 4.7.2, Agriculture and Forestry Resources
- Section 4.7.3, Cultural Resources
- Section 4.7.4, Energy
- Section 4.7.5, Geology and Soils
- Section 4.7.6, Hydrology and Water Quality
- Section 4.7.7, Land Use and Planning
- Section 4.7.8, Mineral Resources
- Section 4.7.9, Population and Housing
- Section 4.7.10, Public Services

- Section 4.7.11, Recreation
- Section 4.7.12, Tribal Cultural Resources
- Section 4.7.13, Utilities and Service Systems
- Section 4.7.14, Wildfire

Refer to Section 4.7 for a discussion and the impact analysis of the Project with respect to these resource topics.

### EIR Topics

The resource topic areas addressed in this chapter of the EIR is listed below:

- Section 4.1, Air Quality and Health Risk
- Section 4.2, Biological Resources
- Section 4.3, Greenhouse Gas Emissions
- Section 4.4, Hazards and Hazardous Materials
- Section 4.5, Noise
- Section 4.6, Transportation and Circulation

## 4.0.2 Environmental Setting and Baseline

An environmental setting establishes the baseline physical conditions or point of reference from which the environmental impacts of the Project and the alternatives to the Project are measured to determine if an impact is significant. Each section within this chapter describes an *environmental setting* and a *regulatory setting*. The environmental setting addresses the conditions that exist prior to implementation of the Project and defines relevant scientific terms associated with the environmental topic addressed in the section. The regulatory setting presents relevant information about federal, state, regional, and/or local laws, regulations, and plans or policies that pertain to the environmental topic addressed in the section.

The environmental baseline identifies the existing physical conditions on, around, and affecting the Project site. The baseline is established to provide a point of comparison between pre-Project conditions (the baseline) and post-Project conditions to determine whether the change to the existing environment caused by the Project is significant under CEQA. While stable in terms of its point in time, the baseline condition is tailored to each environmental topic area and is established by the significance criteria (discussed below). Generally, the baseline is the same as the "environmental setting," i.e., the physical environmental conditions in the vicinity of the Project, as they existed in Spring 2022, when the City published the NOP for the Project (CEQA Guidelines Sections 15125(a), 15126.2(a)).[1]

[1] The City issued the NOP for the EIR on April 4, 2022.

## 4.0.3 Oakland Thresholds of Significance

The City of Oakland has established local *CEQA Thresholds of Significance Guidelines* (commonly referred to as "thresholds"), which have been in general use by the City since at least 2002, parts of which were most recently updated in December 2020. The thresholds are intended to help clarify and standardize analysis and decision-making in the environmental review process in the City of Oakland. The thresholds are offered as guidance in preparing all environmental review documents and are intended to implement and supplement provisions in the CEQA Guidelines for determining the significance of environmental effects, including sections 15064, 15064.4, 15064.5, 15065, 15382 and Appendix G. (The classifications of environmental impact or significance in this Draft EIR are described in 4.0.5 below.) The thresholds are used to evaluate the potential primary and secondary environmental effects of the Project, including potential effects of mitigation measures.

## 4.0.4 Environmental Impacts

CEQA requires the analysis of the Project on the environment. The levels of impact classifications that the Project may have on the environment in this Draft EIR are described in 4.0.5 below (following the description below of key factors related to the level of impact classifications).

As required by section 15126.2(a) of the CEQA Guidelines, the impact analysis addresses direct, indirect, short-term, long-term, onsite and, if applicable, off-site impacts. Under CEQA, economic or social changes by themselves are not considered to be significant impacts but may be considered in linking a project to a physical environmental change, or in determining whether an impact is significant.

This EIR addresses potential adverse effects of the Project on the environment pursuant to CEQA. Potential effects of the environment on a project are legally not required to be analyzed or mitigated under CEQA. However, this document analyzes potential effects of the environment on the Project to provide information to the public and decision-makers.

Impact statements have an alpha designation that corresponds to the environmental topic, such as Impact "NOI" for noise. A number follows the alpha designation to designate the sequence of the impact. For example, "Impact NOI-1" is the first noise impact identified. All impact statements are in bold text; the impact statements also indicate the number of the significance threshold/criterion number that the impact statement pertains to, and then states the level of impact classification prior to the incorporation of any mitigation measures.

### Oakland Standard Conditions of Approval

The City adopted SCAs in November 3, 2008 (Ordinance No. 12899 C.M.S) and revised through December 16, 2020, pursuant to Public Resources Code section 21083.3 and CEQA Guidelines Section 15183 (and now Section 15183.3). SCAs are identified during the CEQA analysis of a project and incorporated into projects when they receive discretionary planning-related approval. They address three aspects of a project: (1) general administrative aspects of the project approval;

(2) environmental protection measures that are incorporated into a project and designed to, and will, substantially mitigate environmental effects; and (3) other SCAs containing requirements to substantially reduce non-environmental effects of a project.

In a CEQA document, such as this EIR, the SCAs applicable to a project are considered requirements of the project and not mitigation. As specified in the City's SCA document, in this Draft EIR the SCAs are included in the regulatory setting discussion (discussed above) of the applicable environmental topic; SCAs are not repeated in the impacts discussion in their entirety, but each SCA has a sequential alpha-numeric reference unique to this Draft EIR.

Many SCAs require the preparation of project-specific technical studies, such as a Construction Noise Management Plan or Transportation Demand Management (TDM) Plan. The technical studies are sometimes required to be prepared during the CEQA review (and the results of the studies incorporated into the CEQA document) rather than after project approval. Technical studies prepared for the Project are incorporated into the environmental analysis and included in the appendices to this Draft EIR. Technical studies required by SCAs and conducted prior to project approval may include project-specific recommendations for mitigating an environmental effect. These recommendations are considered *SCA Implementation Measures* for the SCA rather than separate mitigation measures.

## 4.0.5 Impact Classifications

The following classifications of level of significance or impacts are used throughout this EIR:

- **Less than Significant** – The impact of the Project does not reach or exceed the defined threshold of significance. No mitigation measures or SCAs are required.
- **Less than Significant with SCAs** – The impact of the Project, factoring in the implementation of SCAs (which are considered part of the Project), does not exceed the defined threshold of significance. No mitigation measure is required.
- **Less than Significant with Mitigation** – The impact of the Project, after the implementation of identified mitigation measures, does not exceed the defined threshold of significance.
- **Potentially Significant** – The impact of the Project, after the implementation of SCAs, may reach or exceed the defined threshold of significance. However, it is not certain that, even in the theoretical worst-case conditions, a significant impact would occur. Feasible mitigation measures may or may not be identified to reduce the potentially significant impact to a less-than-significant level.
- **No Impact** – The Project would not cause a noticeable effect on the environment, as measured by the defined threshold of significance. No mitigation would be required.

## 4.0.6 Organization of Each Technical Analysis Section in this Chapter

This chapter includes Sections 4.1 through 4.7, which present the technical analysis of the environmental topics or factors under CEQA. Each of the components below are previously

described in detail in 4.0.2 through 4.0.5. Generally, each section in this chapter is organized in the following sequence:

- **Environmental Setting** – The initial discussion in each section is this overview of the conditions that exist prior to implementation of the Project and defines relevant scientific terms associated with the environmental topic addressed in the section (described further in Section 4.0.2 above).
- **Regulatory Setting** – Each section discusses the regulatory setting and presents relevant information about federal, state, regional, and/or local laws, regulations, plans or policies and SCAs associated with the environmental topic (described further in Section 4.0.2 above).
- **Significance Criteria** – This part of each section lists the Oakland significance criteria associated with the environmental topic addressed in the section as specified in the *Oakland Thresholds of Significance* document. This section also discusses the *Approach to Analysis*, which presents the analytical methods and key assumptions used in the evaluation of effects of the Project. Where applicable, this section also summarizes *Topics Considered and No Impact Determined* because a particular issue (significance criterion) would not be affected by the Project or does not pertain to the Project or its setting.
- **Impacts of the Project** – This part of each section presents and discusses in detail the environmental impact analysis for all aspects of the Project. Where applicable, impacts associated with mitigation measures are also identified and discussed. For each significance criterion (or groups of related criteria within an environmental topic), the impact statement precedes the discussion of each impact analysis and summarizes the potential for the Project to have an impact. SCAs are identified. The impact determination is stated at the close of the impact analysis discussion.
- **Cumulative Analysis** – The cumulative analysis for each environmental topic generally is included at the end of each section. Each analysis starts with the geographic context of each cumulative analysis and summarizes the cumulative context (described in detail in Section 4.0.7 below). Each significance criterion on the environmental topic addressed in each section is typically addressed under a single bold impact statement if the cumulative impact is less than significant. However, more than one cumulative impact statement may be warranted if certain criteria result in a significant impact.
- **References** – Each section includes a list of all persons and documents consulted or relied on for that analysis. All references cited in this Draft EIR are compiled as an *Administrative References Record* for public reference.

## 4.0.7 Cumulative Analysis

### Definitions

In accordance with CEQA and the Oakland Thresholds, this Draft EIR includes a cumulative analysis to evaluate whether the Project's incremental effect is cumulatively considerable when combined with other projects causing related impacts.

CEQA defines cumulative as "two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts." The cumulative impact from several projects is the change in the environment, which results from the

incremental impact of a project when added to other *closely related past, present, and reasonably foreseeable probable future projects* (referred to collectively in this Draft EIR as "cumulative development").

Pursuant to CEQA Guidelines section 15130, this Draft EIR analyzes the potential cumulative effects of the Project combined with cumulative development. If a cumulative effect is identified, the analysis then evaluates whether the Project's contribution to the cumulative effect is *cumulatively considerable*, which is a significant impact. Specifically, a cumulatively considerable contribution means that the incremental effects of an individual project are significant when viewed in connection with the effects of cumulative development.

## Geographic Scope

The geographic scope used to assess cumulative impacts may vary depending on the specific environmental topic being analyzed. For example, considerations for cumulative public services effects are different from those used to assess cumulative air quality. Only development within the public service areas and providers of the Project site could contribute to a cumulative public services effect; on the other hand, all development within the air basin contributes to regional emissions of criteria pollutants. Accordingly, the geographic scope of each cumulative analysis discussion can vary and is described at the start of the cumulative impact analysis.

## Cumulative Development and Assumptions

CEQA Guidelines section 15130(b)(1) identifies two approaches to cumulative impacts analyses to account for the cumulative development. Consistent with CEQA, the City's adopted thresholds describes a combination of both the *forecast method* (i.e., a projection or model) and/or *list method* (i.e., a list containing past, present, and reasonably foreseeable future projects).

The analyses in this Draft EIR employ a list-based approach and projections-based approach, depending on the environmental topic analyzed. For instance, the cumulative analysis of impacts to historical architectural resources considers individual projects that are anticipated in the Project site vicinity that may affect historical architectural resources also affected by the Project. By comparison, the cumulative population and housing analysis relies on a projection of overall citywide growth and other reasonably foreseeable projects, which is the typical methodology the City applies to analysis of population and housing impacts.

Cumulative development in this Draft EIR is generally established using the City of Oakland's Major Projects list dated May 2022 (see Appendix B), together with past, present, existing, approved, pending and reasonably foreseeable future projects (summarized consistently in the cumulative analyses in this EIR as "past, present, and reasonably foreseeable") beyond the Project site.[2]

[2] The City of Oakland published the most recent Major Development Projects List in May 2023, since publication of the NOP for this Draft EIR in April 2022. There are no new projects on the updated list within 1,00 feet of the project site.

As discussed above, cumulative projects considered in the cumulative context can vary by environmental topic; therefore, some of the Major Projects listed, or other cumulative development, may not be directly relevant to the cumulative context, depending on the environmental topic. In some cases, the cumulative context may include more development than listed in the Major Projects list. A primary example is the transportation analyses (and transportation-related traffic and air quality), which use the Alameda County Congestion Management Program travel demand model (the Countywide Travel Demand Model), which reflects traffic from projects citywide and the broader regional context. Alternatively, geology and soils cumulative impact analysis would primarily consider projects that are more localized or even site-specific, which may not, for example, include all projects on the list that are in distant Oakland areas. The cumulative discussions in each topical section throughout Chapter 4 describe the cumulative context considered for each topic.

### *Cumulative Projects in the Vicinity of the Project Site*

Cumulative projects are those located closest to the Project site. According to the May 2022 map of current projects (Appendix B), the only cumulative project within approximately 1,000 feet of the Project site is a sound wall at 3927 Wattling Street. This minor project, which would construct a new 904-foot long, 16-foot-tall sound wall separating a new residential development from the railroad, was approved in October 2019.

This page intentionally left blank

# 4.1 Air Quality

## 4.1.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts on air quality. The section first includes a description of the existing environmental setting as it relates to air quality in the Project vicinity and the region and provides a regulatory framework that discusses applicable state and local regulations. The section then includes an evaluation of potential impacts of the Project on air quality, health risk, and odors.

The information and analysis in this section is based on a review of the Project; applicable local policies and regulations; guidance on performing air quality and health risk analyses from the Bay Area Air Quality Management District (BAAQMD or District) and the Office of Environmental Health Hazard Assessment (OEHHA) using emission factors, emissions estimation and dispersion models from the United States Environmental Protection Agency (U.S. EPA), California Air Resources Board (CARB) and the BAAQMD.

The California Environmental Quality Act (CEQA) requires the analysis of potential adverse effects of a project on the surrounding environment. A CEQA evaluation is generally not required to consider potential effects of the environment on a project's future users or local residents, except when the project may exacerbate existing hazards or existing conditions.[1] Though not required by CEQA, the BAAQMD *California Environmental Quality Act Air Quality Guidelines (CEQA Guidelines)* recommend evaluating the potential effects of existing air quality conditions on the project (BAAQMD, 2017a) which may be used to provide information to decision-makers and the public. However, as the Project would not introduce any sensitive receptors to the site, this evaluation was not necessary.

## 4.1.2 Environmental Setting

### Topography and Climate

Climate and meteorological conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The Project site is located in the City of Oakland and is within the boundaries of the San Francisco Bay Area Air Basin (SFBAAB or Bay Area). The SFBAAB encompasses the nine-county region including all of Alameda, Contra Costa, Santa Clara, San Francisco, San Mateo, Marin, and Napa Counties, and the southern portions of Solano and Sonoma Counties.

The climate of the Bay Area is determined largely by a high-pressure system that is often present over the eastern Pacific Ocean off the west coast of North America. During winter, the Pacific high-pressure system shifts southward, allowing an increased number of storm systems to pass through the region. During summer and early fall, when fewer storms pass through the region,

[1] *California Building Industry Association v. Bay Area Air Quality Management District* (December 17, 2015) 62 Cal.4th 369.

emissions generated in the Bay Area accumulate as a result of the more stable atmospheric conditions. The combination of abundant sunshine, the restraining influences of topography and subsidence inversions creates conditions conducive to the formation of photochemical pollutants, such as ground-level ozone and secondary particulates, including nitrates and sulfates.

More precisely, the Project lies within the Northern Alameda and Western Contra Costa Counties climatological subregion. This subregion extends from Richmond to San Leandro with San Francisco Bay as its western boundary, and its eastern boundary defined by the Oakland-Berkeley Hills. In this subregion, marine air traveling through the Golden Gate, as well as across San Francisco and the San Bruno Gap (a gap in the Coastal Range between the ocean and the San Francisco Airport), is a dominant weather factor. Average wind speeds vary from season to season with the strongest average winds occurring during summer and the lightest average winds during winter. Summer temperatures in Oakland average at a low of 57°F and a high of 72°F, while winter temperatures average at a low of 46°F and a high of 59°F. Rainfall is highly variable and confined almost exclusively to the "Wet Season" period from early November to mid-April. Oakland averages 24 inches of precipitation annually, but because much of the area's rainfall is derived from the fringes of mid-latitude storms, a shift in the annual storm track of a few hundred miles can mean the difference between a very wet year and near drought conditions (BAAQMD, 2017a).

## Air Pollutants of Concern

Air pollutants of concern within the SFBAAB include criteria air pollutants and toxic air contaminants (TACs).

### *Criteria Air Pollutants*

Criteria air pollutants are a group of six common air pollutants for which the U.S. EPA has set ambient air quality standards. Criteria air pollutants include ground level ozone, carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), particulate matter (PM), and lead. PM is classified by particle size—$PM_{10}$ consists of particulate matter that is 10 microns[2] or less in diameter, while $PM_{2.5}$ refers to the subset of $PM_{10}$ that is less than 2.5 microns or less in diameter. Most of the criteria air pollutants are directly emitted; however, ozone is a secondary pollutant that is formed in the atmosphere by chemical reactions between nitrogen oxides (NOx), and reactive organic gases (ROG) in the presence of sunlight as discussed below. In addition to the criteria air pollutants identified by the U.S. EPA, California has added four criteria air pollutants including visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

#### Ozone

Ozone is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving ROG (also referred to by some regulatory agencies as volatile organic compounds [VOCs]) and $NO_X$ in the presence of sunlight. The main sources of ROG and $NO_X$, often referred to as ozone precursors, are the evaporation of solvents, paints, and fuels and combustion processes (including motor vehicle engines). In the Bay Area, automobiles are the single largest source of ozone precursors. Short-term exposure to ozone can irritate the eyes and

[2] A micron is one-millionth of a meter.

constrict the airways. According to the U.S. EPA and CARB, besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema; increase frequency of asthma attacks; cause coughing and sore or scratchy throat; make the lungs more susceptible to infection; and cause chronic obstructive pulmonary disease. Exposure to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children (U.S. EPA, 2021a; CARB, 2022a). EPA states that the people most at risk from breathing air containing ozone include those with asthma, children, older adults, and people who are active outdoors, especially outdoor workers (U.S. EPA, 2021a).

### Nitrogen Dioxide ($NO_2$) and Nitrogen Oxides (NOx)

$NO_2$ is a major component of the group of gaseous nitrogen compounds commonly referred to as $NO_X$, which also includes nitric oxide (NO). $NO_x$ is a reddish-brown gas produced by fuel combustion in motor vehicles, industrial stationary sources, ships, aircraft, and rail transit. NO is converted to $NO_2$ when it reacts with ozone or undergoes photochemical reactions in the atmosphere. Therefore, $NO_2$ emissions from combustion sources are typically evaluated based on the amount of $NO_X$ emitted from the source. $NO_2$ is a concern for air quality because it acts as a respiratory irritant and is a precursor of ozone (U.S. EPA, 2021b). Short-term exposures can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms such as coughing, wheezing, or difficulty breathing. Longer exposures to elevated concentrations of $NO_2$ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections, requiring hospital admissions and visits to emergency rooms. Infants and children are particularly at risk from exposure to $NO_2$ because of their more rapid breathing rate for their body weight and their typically greater duration of outdoor exposure. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease (CARB, 2022b).

### Particulate Matter (PM)

Sources of PM, such as wood burning in fireplaces, demolition, and construction activities, are more local, while other sources, such as vehicular traffic, have a more regional effect. As discussed above, $PM_{10}$ and $PM_{2.5}$ represent fractions of PM that can be inhaled into the air passages and lungs causing adverse health effects, particularly at concentrations above the federal and state ambient air quality standards. $PM_{2.5}$ (including diesel exhaust particles) is thought to have greater effects on health because these particles are so small and thus can penetrate to the deepest parts of the lungs. Larger dust particles (diameter greater than 10 microns) settle out of the ambient air rapidly and are filtered by human breathing passages; therefore, this dust is of more concern as a soiling nuisance rather than as a health hazard. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, and acute and chronic respiratory symptoms such as shortness of breath and painful breathing.

### Carbon Monoxide (CO)

CO is an odorless, colorless gas usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicles, which have their highest emissions during low travel speeds, idling, stop-and-go driving, cold starts, and hard acceleration. When

inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the blood's oxygen-carrying capacity. The most common effects of CO exposure are fatigue, headaches, confusion, and dizziness caused by inadequate oxygen delivery to the brain. Short-term exposure to elevated CO may result in reduced oxygen to the heart, accompanied by chest pain, also known as angina (U.S. EPA, 2021c). For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress. Inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance. Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO (CARB, 2022c).

### Other Criteria Pollutants

$SO_2$ is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. $SO_2$ is also a precursor to the formation of PM, atmospheric sulfate, and atmospheric sulfuric acid that could precipitate downwind as acid rain. According to U.S. EPA, short-term exposures to $SO_2$ can harm the human respiratory system and make breathing difficult (U.S. EPA, 2022). It can irritate lung tissue and increase the risk of acute and chronic respiratory disease (BAAQMD, 2017a).

Leaded gasoline (phased out in the United States beginning in 1973), lead based paint (on older houses and cars), smelters (metal refineries), and manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. Lead has a range of adverse neurotoxic health effects, which puts children at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California.

In addition to the above pollutants, California also regulates emissions of hydrogen sulfide, sulfates, visibility-reducing particles, and vinyl chloride; however, these are not considered impactful for the Project.

## Toxic Air Contaminants (TACs)

In addition to criteria air pollutants, sources from individual projects emit TACs, a diverse group of air pollutants that may cause chronic and acute adverse effects on human health, including birth defects, neurological damage, cancer, and death. TACs are air pollutants that may lead to serious illness or increased mortality, even when present in relatively low concentrations. There are over 200 TACs with varying degrees of toxicity identified by state of California (CARB, 2021). Individual TACs vary greatly in the health risk they present; at a given level of exposure, one TAC may pose a hazard that is many times greater than another. In 1998, CARB classified diesel particulate matter (DPM) as a TAC, citing its potential to cause cancer and other health problems (CARB, 1998). The U.S. EPA concluded that long-term exposure to diesel engine exhaust is likely to pose a lung cancer risk to humans and can also contribute to other acute and chronic health effects (U.S. EPA, 2002). The BAAQMD regulates TACs by using a risk-based approach as opposed to establishing ambient concentration standards. This risk-based approach

utilizes a health risk assessment (HRA) to determine the specific sources and TACs to control as well as the level of control necessary to reduce risk to acceptable levels. An HRA analyzes exposure to toxic substances and human health risks based on the dose and potency of the toxic substances.[3]

### *Diesel Particulate Matter (DPM)*

CARB identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways.

## Existing Air Quality

### *Ambient Air Monitoring Data*

The BAAQMD operates a regional monitoring network that measures the ambient concentrations of the six criteria air pollutants. Existing and probable future levels of air quality in Oakland can generally be inferred from historical ambient air quality data based on measurements conducted by the BAAQMD at its nearby monitoring stations. The monitoring stations closest to the Project site are located at 9925 International Boulevard and 1100 21st Street in West Oakland. The International Boulevard station is located approximately 3.6 miles southeast of the Project site while the Oakland West station is approximately 4.3 miles to the northwest of the Project site. Both the International Boulevard and Oakland West stations monitor ozone, $PM_{2.5}$ and $NO_2$ concentrations. $PM_{10}$ is not measured at either monitoring station in Oakland.

Pollutants of concern in the Bay Area include $O_3$ and PM as the SFBAAB is in non-attainment with respect to the federal and state standards for these pollutants (as explained in detail under Section 4.1.3, *Regulatory Setting*, below). **Table 4.1-1** shows a five -year summary of monitoring data (2016 through 2020) for these pollutants from the International Boulevard station, as well as for $NO_2$, an ozone precursor. Due to the proximity of the Project site to the International Boulevard station, air quality measurements collected at this station are understood to be generally representative of conditions in the vicinity of the Project site. Table 4.1-1 also compares measured pollutant concentrations with the California Ambient Air Quality Standards (CAAQS or "state standards") and the National Ambient Air Quality Standards (NAAQS or "national standards") (see Section 4.1.3, *Regulatory Setting*, below).

[3] An HRA is required for stationary source permitting approval if the BAAQMD concludes that projected emissions of a specific air toxic compound from a proposed new or modified source suggest a potential public health risk. In these instances, a HRA for the source in question must be prepared. Such an assessment generally evaluates acute (short-term) effects, chronic (long-term) effects, and the increased risk of cancer as a result of exposure to one or more TACs.

**TABLE 4.1-1**
**HIGHEST MEASURED AIR POLLUTANT CONCENTRATIONS AT THE INTERNATIONAL BOULEVARD MONITORING STATION (2016–2020)**

| Pollutant | Standard[a] | Monitoring Data by Year[a] | | | | |
|---|---|---|---|---|---|---|
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| **Ozone** | | | | | | |
| Highest 1-Hour Average (ppm) | 0.090 | 0.082 | **0.136** | 0.061 | **0.098** | 0.090 |
| Days Exceeding State Standard | | 0 | **2** | 0 | **1** | 0 |
| Highest 8-Hour Average (ppm) | 0.070 | 0.057 | **0.100** | 0.052 | **0.073** | 0.066 |
| Days Exceeding State Standard | | 0 | **2** | 0 | **2** | 0 |
| Days Exceeding National Standard | 0.070 | 0 | **2** | 0 | 0 | 0 |
| **Fine Particulate Matter** | | | | | | |
| Highest 24-Hour Average ($\mu g/m^3$) | 35 | 15.5 | **70.2** | **172.1** | 24.7 | **167.7** |
| Measured Days over National Standard | | 0 | **7** | **13** | 0 | **11** |
| State Annual Average ($\mu g/m^3$) | 12 | 6.1 | 9.4 | 11.8 | 6.7 | 11.4 |
| National Annual Average ($\mu g/m^3$) | 12.0 | 6.1 | 9.3 | 11.7 | 6.7 | 11.4 |
| **Carbon Monoxide** | | | | | | |
| Highest 8-Hour Average (ppm) | 9 | 2.2 | 2.1 | 3.1 | 1.7 | NA |
| Measured Days over State Standard | | 0 | 0 | 0 | 0 | NA |
| **Nitrogen Dioxide** | | | | | | |
| Highest Hourly Average (ppm) | 0.18 | 0.059 | 0.065 | 0.073 | 0.062 | 0.059 |
| Measured Days over State Standard | | 0 | 0 | 0 | 0 | 0 |

NOTES:
$\mu g/m^3$ = micrograms per cubic meter; ppm = parts per million; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; $PM_{10}$ = particulate matter 10 microns or less in diameter
**Bold** indicates values that exceed the ambient air quality standard.
[a] Generally, national and state standards are not to be exceeded more than once per year.
SOURCE: CARB, 2022d.

### *Existing Health Risk in the Surrounding Area*

As discussed previously, the U.S. EPA and CARB recognize that exposure to elevated levels of ground-level ozone and PM can be a cause of respiratory and cardiovascular health effects. Through its Community Air Risk Evaluation (CARE) program, BAAQMD compiled estimates of TAC emissions in the SFBAAB for all major source categories including oil refineries, power plants, landfills, dry cleaners, gasoline stations, on-road vehicles, off-road vehicles and equipment, ships, and trains. BAAQMD's cancer-risk weighted emissions inventory shows that a small subset of TACs account for approximately 95 percent of the total cancer risk from air pollutants in the Bay Area, and that DPM is by far the largest driver of cancer risk from TACs. CARE estimates are based on the cancer risk calculation methods adopted by the California EPA's OEHHA in 2015.

The BAAQMD provides a publicly available inventory of TAC-related health risks for permitted stationary sources throughout the Bay Area as well as for freeways, rail and major roadways. This

inventory presents community risk and hazards from screening tools and tables that are intentionally conservative (that is, health protective). The screening-level risk factors derived from the BAAQMD's tool are intended to indicate whether additional review related to the impact is necessary and are not intended to be used to assess precise risk levels for all projects. The BAAQMD's Google Earth-based inventory of stationary source risks and hazards, most recently updated in 2018, indicates that there is only one existing permitted stationary source within 1,000 feet of the Project site boundaries – the emergency generator at the Home Depot to the east of the Project site (BAAQMD, 2022). Mobile sources of TACs in the vicinity include traffic on Interstate 880 (I-880), Fruitvale Avenue and High Street.

The Bay Area has benefited from dramatic reductions in public exposure to TACs over time. Based on ambient air quality monitoring, the estimated lifetime cancer risk from all TACs for Bay Area residents declined from 4,100 cases per million in 1990 to 690 cases per million people in 2014. This represents an 83 percent decrease between 1990 and 2014. The cancer risk from DPM, which accounts for most of the cancer risk from TACs as discussed above, has declined substantially over the past 15 to 20 years as a result of CARB regulations and BAAQMD programs to reduce emissions from diesel engines. However, DPM still accounts for roughly 82 percent of the total cancer risk related to TACs (BAAQMD, 2017b).

CalEnviroScreen is a mapping tool developed by the Office of Environmental Health Hazard Assessment (OEHHA), on behalf of the California Environmental Protection Agency (CalEPA), which identifies California communities by census tract that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. It uses environmental, health, and socioeconomic information available from state and federal government sources to produce scores for every census tract in the state. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores. The Project site is located in an area with the highest CalEnviroScreen score between 90 and 100 (OEHHA, 2021).

## Odorous Emissions

Though offensive odors from stationary sources rarely cause any physical harm, they still remain unpleasant and can lead to public distress generating citizen complaints to local governments. The occurrence and severity of odor impacts depend on the nature, frequency and intensity of the source; wind speed and direction; and the sensitivity of receptors. The BAAQMD's CEQA Guidelines recommend that odor impacts be considered for any proposed new odor sources located near existing receptors, as well as any new sensitive receptors located near existing odor sources. Generally, increasing the distance between the receptor and the odor source would mitigate odor impacts. The BAAQMD provides examples of odor sources, which include wastewater treatments plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. There are no odor sources in the vicinity of the Project site.

## Sensitive Receptors

Air quality does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. More sensitive population groups include the elderly and the young; those with respiratory disease, such as asthma and chronic obstructive pulmonary disease; and those with other environmental or occupational health exposures (e.g., indoor air quality) that affect cardiovascular or respiratory diseases. The BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, daycare centers, hospitals, and senior-care facilities. Workers are not considered sensitive receptors because they have other legal protections; specifically, employers must follow regulations set forth by the Occupation Safety and Health Administration (OSHA) to ensure the health and well-being of their employees (OSHA, 2011).

The proximity of sensitive receptors to motor vehicles is an air pollution concern, especially in heavily urbanized areas, including the Project vicinity, where roadway volumes are higher than most other parts of the Bay Area. Vehicles also contribute to particulate matter emissions by generating road dust and through suspended particulate from brake and tire wear.

Existing sensitive receptors in the vicinity of the Project site include residential uses. The nearest residences are located to the north of the Project site along Elmwood Avenue and 36th Avenue less than 100 feet from the Project site boundary. Residential uses are also located to the northwest across Fruitvale Boulevard and approximately 500 feet to the south across the Tidal Canal, in the City of Alameda. The area to the east and southeast of the Project site, through which Project trucks would travel to access the Project site is primarily commercial and industrial. There are no schools or daycares in the immediate vicinity of the Project site. The Lazear Charter Academy is located approximately 1,400 feet to the northwest; Arise High School and Ascend Elementary School are located approximately 1,750 feet and 1,400 feet to the north, respectively. The Lazear Academy and Ascend Elementary School have grades from transitional kindergarten (TK) to 8th grade. Arise High School has grades 9 through 12.

# 4.1.3 Regulatory Setting

### *Clean Air Act and National Ambient Air Quality Standards*

The federal Clean Air Act (CAA) requires U.S. EPA to establish national ambient air quality standards to protect public health and the environment. NAAQS are classified as either primary or secondary. Primary standards are meant to provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

U.S. EPA has set NAAQS for several criteria air pollutants: ozone, $NO_2$, $SO_2$, CO, PM ($PM_{10}$ and $PM_{2.5}$), and lead. **Table 4.1-2** summarizes the current NAAQS and indicates the principal sources for each of these pollutants.

**TABLE 4.1-2**
**STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND THE SAN FRANCISCO BAY AREA AIR BASIN'S ATTAINMENT STATUS**

| Pollutant | Averaging Time | National Standards | | California Standards | |
|---|---|---|---|---|---|
| | | Concentration | Attainment Status | Concentration | Attainment Status |
| Ozone | 1 hour | — | — | 0.09 ppm | Nonattainment |
| | 8 hours | 0.07 ppm | Nonattainment | 0.070 ppm | Nonattainment |
| CO | 1 hour | 35 ppm | Attainment | 20 ppm | Attainment |
| | 8 hours[a] | 9.0 ppm | Attainment | 9.0 ppm | Attainment |
| $NO_2$ | 1 hour | 0.100 ppm | Unclassified | 0.18 ppm | Attainment |
| | Annual Avg. | 0.053 ppm | Attainment | 0.030 ppm | Attainment |
| Sulfur Dioxide | 1 hour | 0.075 ppm | Attainment | 0.25 ppm | Attainment |
| | 24 hours | 0.14 ppm | Attainment | 0.04 ppm | Attainment |
| | Annual Avg. | 0.030 ppm | Attainment | — | — |
| $PM_{10}$ | 24 hours | 150 µg/m$^3$ | Nonattainment | 50 µg/m$^3$ | Nonattainment |
| | Annual Avg. | — | — | 20 µg/m$^3$ | Nonattainment |
| $PM_{2.5}$ | 24 hours | 35 µg/m$^3$ | Nonattainment | — | — |
| | Annual Avg. | 12 µg/m$^3$ | Unclassified/ Attainment | 12 µg/m$^3$ | Nonattainment |
| Lead | Monthly Avg. | — | — | 1.5 µg/m$^3$ | Attainment |
| | Quarterly | 1.5 µg/m$^3$ | Attainment | — | — |
| Hydrogen Sulfide | 1 hour | — | — | 0.03 ppm | Unclassified |
| Sulfates | 24 hours | — | — | 25 µg/m$^3$ | Attainment |
| Visibility-Reducing Particles | 8 hours | — | — | Extinction of 0.23/km; visibility of 10 miles or more | Unclassified |
| Vinyl Chloride | 24 hours | — | — | 0.01 ppm | — |

NOTES:
µg/m$^3$ = micrograms per cubic meter; ppm = parts per million; Avg. = Average; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter; $PM_{10}$ = particulate matter 10 microns or less in diameter

[a] A more-stringent 8-hour carbon monoxide state standard exists around Lake Tahoe (6 ppm).

SOURCE: BAAQMD, 2017c.

U.S. EPA classifies geographic areas as either attainment or non-attainment for each criteria air pollutant, based on whether the NAAQS have been achieved. Air districts in areas that are designated non-attainment must prepare regional air quality plans, discussed in further detail below, to be included in the overall State Implementation Plan. Areas that have a "maintenance" designation have been non-attainment for a certain criteria pollutant but have been re-designated as attainment. As shown in Table 4.1-2, the SFBAAB has been classified as a non-attainment area for violation of the state 1-hour and 8-hour ozone standards, the federal ozone 8-hour standard, the state $PM_{10}$ 24-hour and annual average standards, the state $PM_{2.5}$ annual average standard, and the federal $PM_{2.5}$ 24-hour standard.

### Hazardous Air Pollutants

Federal law uses the term "hazardous air pollutants" (HAPs) to refer to the same types of compounds that are referred to as TACs under state law; refer to the discussion of state-identified TACs, below. Currently, 187 substances are regulated as HAPs. The federal CAA requires U.S. EPA to identify the National Emission Standards for Hazardous Air Pollutants (NESHAPs) to protect public health and welfare. More than 125 types of stationary sources are regulated under the NESHAPS, while mobile-source emissions of HAPs are regulated through vehicle and fuel standards.

## State

### *California Clean Air Act and California Ambient Air Quality Standards*

At the state level, CARB oversees California air quality policies and regulations. California has adopted its own air quality standards, known as CAAQS, as shown in Table 4.1-2. California's ambient standards are at least as protective as the NAAQS and are often more stringent.

In 1988, California enacted the California CAA (California Health and Safety Code Section 39600 et seq.), which called for the designation of areas as attainment or non-attainment based on state ambient air quality standards (i.e., the CAAQS), rather than the federal standards. The California CAA requires each air district in which CAAQS are exceeded to prepare a plan that documents reasonable progress toward attainment. If an air basin (or portion thereof) exceeds the CAAQS for a particular criteria air pollutant, it is considered to be non-attainment for that criteria air pollutant until the area can demonstrate compliance. As indicated in Table 4.1-2, the SFBAAB is classified as non-attainment for 8-hour ozone, 1-hour ozone, annual average $PM_{10}$, 24-hour $PM_{10}$, and annual average $PM_{2.5}$.

With respect to the criteria air pollutants identified only by the state of California (sulfates, visibility-reducing particles, and vinyl chloride), the Project would either not generate these pollutants during construction or day-to-day operations; or such emissions would be accounted for as part of the pollutants estimated in this analysis (visibility-reducing particles are associated with PM emissions and sulfates are associated with $SO_2$). Consequently, these topics are not discussed further.

### *Toxic Air Contaminants*

The California Health and Safety Code defines TACs as air pollutants that may cause or contribute to an increase in mortality or in serious illness, or that may pose a present or potential hazard to human health. The State Air Toxics Program was established in 1983 under AB 1807. A total of 243 substances have been designated as TACs under California law; they include the 187 (federal) HAPs adopted in accordance with state law. The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify, quantify, and evaluate risks from air toxics sources; however, AB 2588 does not regulate air toxics emissions.

Following the designation of DPM emissions from diesel-fueled engines as a TAC, in 2000, CARB approved its comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from

both new and existing diesel-fueled vehicles and engines. Further regulations of diesel emissions by CARB include the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression Ignition Diesel Engines and Equipment Program. All of these regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment (refer to the detailed discussion below).

### *Community Air Protection Program (AB 617)*

AB 617 was promulgated into state law in 2017. The purpose of this legislation is for CARB to establish the Community Air Protection Program (CAPP). CARB's objective in implementing the CAPP is to reduce human health risk levels by reducing air toxics exposure in communities most impacted by TAC emissions. CARB requires that air districts "must initiate community partnerships and undertake a robust public process in developing and implementing the community emissions reduction programs." There have been 17 designated communities throughout the state targeting emissions reductions, community monitoring or both. The majority of AB 617 communities have both reduction and monitoring designations. The state legislature has provided a funding mechanism to support early actions allowing for deployment of cleaner technologies for designated communities as well as grants to promote community participation in both the monitoring and emissions reductions aspects of the program. Other aspects of the program include accelerated retrofit of pollution controls on industrial stationary sources, an increase in financial penalties, and increased transparency and availability of emissions and air quality information thereby driving air pollution control efforts statewide with a goal of improved intra-Air District communication and cooperation.

The Project site is located within East Oakland which was designated a CAPP community in 2021. East Oakland was selected amongst high priority communities in the Bay Area due to longstanding air quality challenges, environmental justice issues, and health inequities. The East Oakland community is home to major goods movement and transportation corridors, as well as air pollution sources associated with industry and the trucking industries. Data shows residents of this community have lower life expectancies and higher mortality rates from lung diseases due to constant exposure to air pollution. This community has a higher rate of asthma emergency room visits and cardiovascular disease than most of California. It also has some of the highest unemployment and housing cost burdens and some of the lowest educational attainment and life expectancy in the State.

East Oakland organizations have partnered with the BAAQMD to build community capacity, increase understanding of local air pollution and environmental justice issues, and bring together cross-agency partnerships necessary for improving environmental health and local air quality improvement. The BAAQMD is partnering with Communities for a Better Environment and other community-based organizations to create a community-based Steering Committee to develop the East Oakland AB 617 Community Emissions Reduction Plan.

### *California Air Resources Board On-Road and Off-Road Vehicle Rules*

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit idling by heavy-duty diesel motor vehicles to reduce public exposure to DPM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure prohibits such vehicles from idling for more than five minutes at any given time.

In 2008, CARB approved the Truck and Bus Regulation to reduce $NO_X$, $PM_{10}$, and $PM_{2.5}$ emissions from existing diesel vehicles operating in California. The requirements, amended in December 2010, apply to nearly all diesel-fueled trucks and buses with a gross vehicle weight rating greater than 14,000 pounds. For the largest trucks in the fleet (those with a gross vehicle weight rating greater than 26,000 pounds), fleet owners could choose one of two methods to comply with the Truck and Bus Regulation's requirements:

- ***Method 1*:** The fleet owner could retrofit or replace engines, starting with the oldest engine model year, to meet 2010 engine standards or better. These retrofits or replacements are phased over 8 years, starting in 2015, and the entire fleet would be retrofitted or replaced by 2023. Thus, all trucks operating in California for fleet operators choosing this option must meet or exceed the 2010 engine emissions standards for $NO_X$ and PM by 2023.
- ***Method 2*:** Starting in 2012, fleet owners choosing this option were required to retrofit a portion of their fleet with diesel particulate filters achieving at least 85 percent removal efficiency, so that by January 1, 2016, their entire fleet would be equipped with diesel particulate filters. However, diesel particulate filters do not typically lower $NO_X$ emissions. Thus, fleet owners choosing this method would still have to comply with the 2010 engine emission standards for their trucks and buses by 2020. As of January 1, 2020, this requirement is enforced by the California Department of Motor Vehicles (DMV) through the vehicle registration process.

Senate Bill (SB) 1, the Road Repair and Accountability Act of 2017, was signed into law on April 28, 2017. SB 1 authorizes the DMV to check that vehicles are compliant with or exempt from CARB's Truck and Bus Regulation. As of January 1, 2020, if a vehicle is not compliant with the rule, DMV will no longer register that vehicle.

In addition to limiting exhaust from idling trucks, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation adopted by CARB on July 26, 2007, aims to reduce emissions by calling for installation of diesel soot filters and encouraging the retirement or replacement, or repowering of older, dirtier engines with newer emission-controlled models. Implementation is staggered based on fleet size (the total of all off-road horsepower under common ownership or control). The largest fleets were to begin compliance by January 1, 2014. Each fleet must demonstrate compliance through one of two methods:

- ***Method 1*:** Calculate and maintain fleet-average emissions targets. This method encourages the retirement or repowering of older equipment and rewards the introduction of newer cleaner units into the fleet.

- ***Method 2*:** Meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (e.g., engine retrofits) on a certain percentage of the total fleet horsepower. The compliance schedule requires full implementation of BACT turn-overs or retrofits by 2023 in all equipment in large and medium fleets and across 100 percent of small fleets by 2028.

## Regional

BAAQMD has jurisdiction over the SFBAAB and monitors and regulates air quality in the region by inspecting and issuing permits for stationary sources of air pollution, responding to citizen complaints, and executing programs to reduce air pollution throughout the region.

### *BAAQMD Air Quality Plans*

As demonstrated in Table 4.1-2, the SFBAAB is designated as nonattainment for both the federal and state ozone and PM standards. As a result, BAAQMD is required to prepare air quality plans under the CAA and the California CAA to meet the federal and state air quality standards in areas that are designated non-attainment. Maintenance plans are required for attainment areas that had previously been designated non-attainment to ensure continued attainment of the standards. Because of the SFBAAB's classification as "serious" non-attainment for the 1-hour ozone standard, BAAQMD is required to update its air quality plan every three years to reflect progress toward meeting attainment status.

In April 2017, BAAQMD adopted the most recent update to its Clean Air Plan (CAP), the *2017 Clean Air Plan*, whose primary goals are to protect public health and to protect the climate (BAAQMD, 2017b). The 2017 CAP updates the Bay Area 2010 CAP and complies with state air quality planning requirements, as codified in the California Health and Safety Code (although the 2017 plan was delayed beyond the three-year update requirement of the code). State law requires the CAP to include all feasible measures to reduce emissions of ozone precursors and to reduce the transport of ozone precursors to neighboring air basins.

The 2017 CAP contains 85 measures to address reduction of several pollutants: ozone precursors, PM, air toxics, and GHGs. Other measures focus on a single type of pollutant: super GHGs such as methane and black carbon that consist of harmful fine particles that affect public health.

### *BAAQMD CEQA Guidelines and Thresholds of Significance*

The *BAAQMD CEQA Air Quality Guidelines* is an advisory document that provides lead agencies, consultants, and project proponents with procedures for assessing air quality impacts and preparing environmental review documents. The document describes the criteria that BAAQMD uses when reviewing and commenting on the adequacy of environmental documents. It recommends thresholds for use in determining whether projects would have significant adverse environmental impacts, identifies methods for predicting project emissions and impacts, and identifies measures that can be used to avoid or reduce air quality impacts.

BAAQMD updated the 1999 CEQA Air Quality Guidelines in 2010. In May 2011, BAAQMD adopted an updated version of its thresholds of significance for use in determining the significance

of projects' environmental effects under CEQA (Thresholds), and published its CEQA Guidelines for consideration by lead agencies. The 2011 CEQA Guidelines Thresholds lowered the previous (1999) thresholds of significance for annual emissions of ROG, $NO_X$, and $PM_{10}$, and set a standard for $PM_{2.5}$. The 2011 CEQA Guidelines also include methods for evaluating risks and hazards for the siting of stationary sources and of sensitive receptors.

The BAAQMD resolution adopting the significance thresholds in 2010 and 2011 was set aside by the Alameda County Superior Court on March 5, 2012. On August 13, 2013, the California Court of Appeals issued a full reversal of the Superior Court's judgment, and on December 17, 2015, the California Supreme Court reversed in part the appellate court's judgment and remanded the case for further consideration consistent with the Supreme Court opinion. The California Supreme Court ruled unanimously that CEQA review is focused on a project's impact on the environment "and not the environment's impact on the project" (*California Building Industry Association v. Bay Area Air Quality Management District* [December 17, 2015] 62 Cal.4th 369). The Supreme Court confirmed that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future residents or users." The Court also held that when a project has "potentially significant exacerbating effects on existing environmental hazards" those impacts are properly within the scope of CEQA because they can be viewed as impacts of the project on "existing conditions" rather than impacts of the environment on the project.

BAAQMD most recently updated its *CEQA Air Quality Guidelines* in May 2017. These guidelines provide recommend quantitative significance thresholds along with direction on recommended analysis methods. BAAQMD states that the quantitative significance thresholds are "advisory and should be followed by local governments at their own discretion," and that lead agencies are fully within their authority to develop their own thresholds of significance. However, BAAQMD offers these thresholds for lead agencies to use in order to inform environmental review for development projects in the Bay Area. Lead agencies may also reference the *CEQA Thresholds Options and Justification Report* developed by BAAQMD staff in 2009. This option provides lead agencies with a justification for continuing to rely on the BAAQMD 2011 thresholds.

### *BAAQMD Rules and Regulations*

Emissions sources associated with the Project would be subject to regulatory requirements in the BAAQMD rules and regulations listed below:

> **Regulation 2, Rules 1 (General Permit Requirements), 2 (New Source Review), and 5 (New Source Review of Toxic Air Contaminants).** Under these rules, all stationary sources that have the potential to emit TACs above a certain level are required to obtain permits from BAAQMD. These rules provide guidance for the review of new and modified stationary sources of TAC emissions, including evaluation of health risks and potential mitigation measures. The regulation also reduces health risks by requiring improved pollution control when existing sources are modified or replaced. If it is determined that a facility's emissions would exceed BAAQMD's threshold of significance for TACs, the source would then be required to implement BACT for Toxics to reduce emissions. Sources of HAPs may also be required to implement Maximum Achievable Control Technology. The proposed emergency generator would be subject to these rules.

**Regulation 6, Rule 6.** Controls trackout of solid material onto public paved roads from three types of sites: large bulk material sites, large construction sites, and large disturbed area sites.

**Regulation 8, Rule 3.** Regulates the quantity of VOCs in architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured.

**Regulation 9, Rule 8.** Imposes emissions limits on spark-ignited engines powered by waste and fossil-derived fuels, compression-ignited engines, and dual fuel pilot compression-ignited engines. limits the hours of operation for emergency standby engines, which must be equipped with a non-resettable totalizing meter that measures either hours of operation or fuel usage.

**Regulation 11, Rule 2.** Controls emissions of asbestos to the atmosphere during demolition, renovation, milling, and manufacturing and prohibits the use of asbestos on certain roadways, in molded insulating materials, and on buildings during construction, alteration, and/or repair. The rule also prohibits visible emissions from any operation involving the demolition, renovation, removal, manufacture, or fabrication of asbestos-containing products and specifies procedures to be implemented during these activities. This rule also includes required procedures for waste disposal and requirements for waste disposal sites to prevent emissions from asbestos-containing materials.

### *Metropolitan Transportation Commission/Association of Bay Area Governments Sustainable Communities Strategy*

The Metropolitan Transportation Commission (MTC) is the federally recognized Metropolitan Planning Organization for the nine-county Bay Area, which includes Alameda County and the City of Oakland. On July 18, 2013, *Plan Bay Area* was jointly approved by the Association of Bay Area Governments' (ABAG's) Executive Board and by MTC (MTC & ABAG, 2013). The plan includes the region's Sustainable Communities Strategy (SCS), as required under SB 375, and the Regional Transportation Plan. Though the purpose of the SCS is to lay out how the region will meet GHG emissions reduction targets set by CARB, by concentrating future growth within Priority Development Areas (PDAs) and Transit Priority Areas (TPAs), the reduction in VMT will also reduce criteria air pollutant emissions.[4]

On July 26, 2017, MTC adopted *Plan Bay Area 2040*, a focused update that builds upon the growth pattern and strategies developed in the original *Plan Bay Area* (2013), but with updated planning assumptions that incorporate key economic, demographic, and financial trends since the original plan was adopted (MTC & ABAG, 2017).

Most recently, on October 21, 2021, the MTC and ABAG jointly adopted Plan Bay Area 2050 as the official regional long-range plan for the Bay Area. Plan Bay Area 2050 connects the elements of housing, the economy, transportation and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for MTC, ABAG and partner organizations to implement over the next five years to make headway on each of the 35 strategies (MTC & ABAG, 2021). It will be several years before the

[4] To be eligible for designation as a Priority Development Area, an area must be within an existing community, near existing or planned fixed transit or served by comparable bus service, and planned for more housing. A Transit Priority Area is an area within one-half mile of an existing or planned major transit stop such as a rail transit station, a ferry terminal served by transit, or the intersection of two or more major bus routes.

regional transportation model and county transportation models are updated to reflect Plan Bay Area 2050 (the models currently incorporate data from Plan Bay Area 2040).

The Project site is located within the Fruitvale and Dimond Areas PDA as defined by Plan Bay Area 2050 and is therefore consistent with the region's Sustainable Communities Strategy (MTC, 2022).

## Local

### *City of Oakland General Plan*

#### Land Use and Transportation Element (LUTE)

The LUTE of the Oakland General Plan (City of Oakland, 2007a) accounts for the air quality considerations of land use compatibility decisions with an objective to minimize land use compatibility conflicts (Objective I/C4), including the following policies:

> ***Policy I/C4.1: Protecting Existing Activities*.** Existing industrial, residential, and commercial activities and areas which are consistent with long term land use plans for the City should be protected from the intrusion of potentially incompatible land uses.
>
> ***Policy I/C4.2: Minimizing Nuisances*.** The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential land uses should be minimized through appropriate siting and efficient implementation and enforcement of environmental and development controls. Where residential development would be located above commercial uses, parking garages, or any other uses with a potential to generate odors, the odor-generating use should be properly vented (e.g., located on rooftops) and designed (e.g., equipped with afterburners) so as to minimize the potential for nuisance odor problems.

#### Open Space, Conservation, and Recreation (OSCAR) Element

The OSCAR Element of the Oakland General Plan contains the following air quality objective and policies that would apply to the Project (City of Oakland, 1996).

> **Objective CO-12: Air Resources.** To improve air quality in Oakland and the surrounding Bay Region.
>
> ***Policy CO-12.4: Design of Development to Minimize Air Quality Impacts*.** Require that development projects be designed in a manner which reduces potential adverse air quality impacts. This may include: (a) the use of vegetation and landscaping to absorb CO and to buffer sensitive receptors; (b) the use of low-polluting energy sources and energy conservation measures; and (c) designs which encourage transit use and facilitate bicycle and pedestrian travel.
>
> ***Policy CO-12.5: Use of Best Available Control Technology*.** Require new industry to use best available control technology to remove pollutants, including filtering, washing, or electrostatic treatment of emissions.
>
> ***Policy CO-12.6: Control of Dust Emissions*.** Require construction, demolition, and grading practices which minimize dust emissions. These practices are currently required by the City and include the following:

- Avoiding earth moving and other major dust generating activities on windy days.
- Sprinkling unpaved construction areas with water during excavation, using reclaimed water where feasible (watering can reduce construction-related dust by 50 percent).
- Covering stockpiled sand, soil, and other particulates with a tarp to avoid blowing dust.
- Covering trucks hauling dirt and debris to reduce spills. If spills do occur, they should be swept up promptly before materials become airborne.
- Preparing a comprehensive dust control program for major construction in populated areas or adjacent to sensitive uses like hospitals and schools.
- Operating construction and earth-moving equipment, including trucks, to minimize exhaust emissions.

***Policy CO-12.7: Regional Air Quality Planning.*** Coordinate local air quality planning efforts with other agencies, including adjoining cities and counties and the public agencies responsible for monitoring and improving air quality. Cooperate with regional agencies such as the BAAQMD, the MTC, the ABAG, and the Alameda County Congestion Management Agency in developing and implementing regional air quality strategies. Continue to work with BAAQMD and the California Air Resources Board in enforcing the provisions of the California and federal Clean Air Acts, including the monitoring of air pollutants on a regular and ongoing basis.

### Oakland Municipal Code

Per the City of Oakland Municipal Code, Title 15 Buildings and Construction, Chapter 15.36 Demolition Permits, 15.36.100 Dust Control Measures:

> *"Best Management Practices" shall be used throughout all phases of work, including suspension of work, to alleviate or prevent fugitive dust nuisance and the discharge of smoke or any other air contaminants into the atmosphere in such quantity as will violate any city or regional air pollution control rules, regulations, ordinances, or statutes. Water or dust palliatives or combinations of both shall be applied continuously and in sufficient quantity during the performance of work and at other times as required. Dust nuisance shall also be abated by cleaning and sweeping or other means as necessary. A dust control plan may be required as condition of permit issuance or at other times as may be deemed necessary to assure compliance with this section. Failure to control effectively or abate fugitive dust nuisance or the discharge of smoke or any other air contaminants into the atmosphere may result in suspension or revocation of the permit, in addition to any other applicable enforcement actions or remedies. (Ord. 12152 Section 1, 1999).*

The City of Oakland has implemented Green Building principles in city buildings through the following programs: Civic Green Building Ordinance (Ordinance No. 12658 C.M.S., 2005), requiring, for certain large civic projects, techniques that minimize the environmental and health impacts of the built environment through energy, water and material efficiencies and improved indoor air quality, while also reducing the waste associated with construction, maintenance and remodeling over the life of the building; Green Building Guidelines (Resolution No. 79871, 2006) which provides guidelines to Alameda County residents and developers regarding construction and remodeling; and Green Building Education Incentives for private developers.

These actions reduce natural gas use in buildings, which reduces criteria pollutant emissions from natural gas combustion.

As of March 2017, Chapter 15.04, Part 11 of the City's Municipal Code requires all new multifamily and non-residential buildings to include full circuit infrastructure for plug-in electric vehicle (PEV) charging stations for at least 10 percent of the total parking spaces. In addition, inaccessible conduits for future expansion of PEV spaces must be installed for 90 percent of the total parking at multi-family buildings and 10 percent of the total parking at non-residential buildings. The new requirements are designed to accelerate the installation of vehicle chargers to address demand. The replacement of gasoline and diesel vehicles with electric vehicles will reduce criteria air pollutants associated with traditional vehicle fuel combustion.

As of December 1, 2020, the Oakland City Council voted to amend the City's Municipal Code to prohibit the use of fossil fuel gas in all newly constructed buildings. This includes the use of natural gas in both residential and commercial buildings. The ordinance allows for developers who can demonstrate that it is not feasible for a new building to go 100 percent electric to apply for a waiver.

### City of Oakland Energy and Climate Action Plan

In July 2020, via Resolution 88267, Oakland City Council adopted the 2030 Equitable Climate Action Plan (ECAP), a comprehensive plan to achieve the 2030 GHG reduction target and increase Oakland's resilience to the impacts of the climate crisis, both through a deep equity lens (City of Oakland, 2020a). Alongside the 2030 ECAP, Council also adopted a goal to achieve community-wide carbon neutrality no later than 2045 (City of Oakland, 2020b). Achieving carbon neutrality will require complete decarbonization (ensuring that all mechanical systems run on clean electricity) of Oakland's building sector. The 2030 ECAP includes a set of 40 Actions projected to result in a 60 percent reduction in GHG emissions by 2030, relative to Oakland's 2005 emission levels. Actions are split into seven sectors: Transportation and Land Use, Buildings, Material Consumption and Waste, Adaptation, Carbon Removal, City Leadership, and Port of Oakland.

## *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on air quality and health risk that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to air quality and health risk. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA AIR-1: Dust Controls – Construction Related** (*Standard Condition of Approval 20*)

**Requirement:** The project applicant shall implement all of the following applicable dust control measures during construction of the project:

a) Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site.

Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible.

b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).

c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d) Limit vehicle speeds on unpaved roads to 15 miles per hour.

e) All demolition activities (if any) shall be suspended when average wind speeds exceed 20 mph.

f) All trucks and equipment, including tires, shall be washed off prior to leaving the site.

g) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.

**Enhanced Controls:** All "Basic" controls listed above plus the following controls if the project involves:

- Extensive site preparation (i.e., the construction site is four acres or more in size); or
- Extensive soil transport (i.e., 10,000 or more cubic yards of soil import/export).

h) Apply and maintain vegetative ground cover (e.g., hydroseed) or non-toxic soil stabilizers to disturbed areas of soil that will be inactive for more than one month. Enclose, cover, water twice daily, or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).

i) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.

j) When working at a site, install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of the site, to minimize wind-blown dust. Windbreaks must have a maximum 50 percent air porosity.

k) Post a publicly visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City's Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours.

l) All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.

**SCA AIR-2: Criteria Air Pollutants – Construction Related** (*Standard Condition of Approval 21*)

**Requirement:** The project applicant shall implement all of the following applicable basic control measures for criteria air pollutants during construction of the project as applicable:

a) Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points.

b) Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations").

c) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. Equipment check documentation should be kept at the construction site and be available for review by the City and the Bay Area Air Quality District as needed.

d) Portable equipment shall be powered by grid electricity if available. If electricity is not available, propane or natural gas generators shall be used if feasible. Diesel engines shall only be used if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand.

e) Low-VOC (i.e., ROG) coatings shall be used that comply with BAAQMD Regulation 8, Rule 3: Architectural Coatings.

f) All equipment to be used on the construction site shall comply with the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") and upon request by the City (and the Air District if specifically requested), the project applicant shall provide written documentation that fleet requirements have been met.

**Enhanced Controls:** All "Basic" controls listed above plus the following controls if the project involves:

- Construction activities with average daily emissions exceeding the CEQA thresholds for construction activity, currently 54 pounds per day of ROG, NOx, or $PM_{2.5}$ or 82 pounds per day of $PM_{10}$.

g) Criteria Air Pollutant Reduction Measures

**Requirement:** The project applicant shall retain a qualified air quality consultant to identify criteria air pollutant reduction measures to reduce the project's average daily emissions below 54 pounds per day of ROG, NOx, or $PM_{2.5}$ or 82 pounds per day of $PM_{10}$. Quantified emissions and identified reduction measures shall be submitted to the City (and the Air District if specifically requested) for review and approval prior

to the issuance of building permits and the approved criteria air pollutant reduction measures shall be implemented during construction.

h) Construction Emissions Minimization Plan

**Requirement:** The project applicant shall prepare a Construction Emissions Minimization Plan (Emissions Plan) for all identified criteria air pollutant reduction measures. The Emissions Plan shall be submitted to the City (and the B if specifically requested) for review and approval prior to the issuance of building permits. The Emissions Plan shall include the following:

i. An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all Verified Diesel Emissions Control Strategies (VDECS), the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.

ii. A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract.

**SCA AIR-3: Diesel Particulate Matter Controls – Construction Related** (*Standard Condition of Approval 22*)

***a. Diesel Particulate Matter Reduction Measures***

**Requirement:** The project applicant shall implement appropriate measures during construction to reduce potential health risks to sensitive receptors due to exposure to diesel particulate matter (DPM) from construction emissions. The project applicant shall choose **one** of the following methods:

i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with current guidance from the California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment to determine the health risk to sensitive receptors exposed to DPM from project construction emissions. The HRA shall be submitted to the City (and the Air District if specifically requested) for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then DPM reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, DPM reduction measures shall be identified to reduce the health risk to acceptable levels as set forth under subsection b below. Identified DPM reduction measures shall be submitted to the City for review and approval prior to the issuance of building permits and the approved DPM reduction measures shall be implemented during construction.

OR

ii. All off-road diesel equipment shall be equipped with the most effective Verified Diesel Emission Control Strategies (VDECS) available for the engine type (Tier 4 engines automatically meet this requirement) as certified by CARB. The equipment shall be properly maintained and tuned in accordance with manufacturer specifications. This shall be verified through an equipment

inventory submittal and Certification Statement that the Contractor agrees to compliance and acknowledges that a significant violation of this requirement shall constitute a material breach of contract.

***b. Construction Emissions Minimization Plan (if required by a above***

**Requirement:** The project applicant shall prepare a Construction Emissions Minimization Plan (Emissions Plan) for all identified DPM reduction measures (if any). The Emissions Plan shall be submitted to the City (and the Bay Area Air Quality District if specifically requested) for review and approval prior to the issuance of building permits. The Emissions Plan shall include the following:

i. An equipment inventory summarizing the type of off-road equipment required for each phase of construction, including the equipment manufacturer, equipment identification number, engine model year, engine certification (tier rating), horsepower, and engine serial number. For all VDECS, the equipment inventory shall also include the technology type, serial number, make, model, manufacturer, CARB verification number level, and installation date.

ii. A Certification Statement that the Contractor agrees to comply fully with the Emissions Plan and acknowledges that a significant violation of the Emissions Plan shall constitute a material breach of contract.

**SCA AIR-4: Stationary Sources of Air Pollution - Toxic Air Contaminants** (*Standard Condition of Approval 24*)

**Requirement:** The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to on-site stationary sources of toxic air contaminants. The project applicant shall choose **one** of the following methods:

a. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk associated with proposed stationary sources of pollution in the project. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City. The approved risk reduction measures shall be implemented during construction and/or operations as applicable.

OR

b. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City:

   i. Installation of non-diesel fueled generators, if feasible, or;

ii. Installation of diesel generators with an EPA-certified Tier 4 engine or engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy, if feasible.

**SCA AIR-5: Truck-Related Risk Reduction Measures – Toxic Air Contaminants** (*Standard Condition of Approval 25*)

***a. Truck Loading Docks***

**Requirement:** The project applicant shall locate proposed truck loading docks as far from nearby sensitive receptors as feasible.

***b. Truck Fleet Emission Standards***

**Requirement:** The project applicant shall comply with all applicable California Air Resources Board (CARB) requirements to control emissions from diesel engines and demonstrate compliance to the satisfaction of the City. Methods to comply include, but are not limited to, new clean diesel trucks, higher-tier diesel engine trucks with added Particulate Matter (PM) filters, hybrid trucks, alternative energy trucks, or other methods that achieve the applicable CARB emission standard. Compliance with this requirement shall be verified through CARB's Verification Procedures for In-Use Strategies to Control Emissions from Diesel Engines.

**SCA AIR-6: Asbestos in Structures** (*Standard Condition of Approval 26*)

**Requirement:** The project applicant shall comply with all applicable laws and regulations regarding demolition and renovation of Asbestos Containing Materials (ACM), including but not limited to California Code of Regulations, Title 8; California Business and Professions Code, Division 3; California Health and Safety Code sections 25915-25919.7; and Bay Area Air Quality Management District, Regulation 11, Rule 2, as may be amended. Evidence of compliance shall be submitted to the City upon request.

## 4.1.4 Environmental Impacts and Mitigation Measures

### Significance Criteria

Appendix G of the CEQA Guidelines contain the following criteria for the evaluation of a project's air quality impacts. The Project would result in a significant air quality impact if it would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. 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;
3. Expose sensitive receptors to substantial pollutant concentrations; or
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The City of Oakland has established thresholds of significance for CEQA impacts which are consistent with those in Appendix G of the CEQA Guidelines. These adopted thresholds are presented below and have been used in the analysis.

The Project would have a significant impact on the environment if it would:

1. During project construction result in average daily emissions of 54 pounds per day of ROG, $NO_X$, or $PM_{2.5}$ or 82 pounds per day of $PM_{10}$;

2. During project operation result in average daily emissions of 54 pounds per day of ROG, $NO_X$, or $PM_{2.5}$ or 82 pounds per day of $PM_{10}$; or result in maximum annual emissions of 10 tons per year of ROG, $NO_X$, or $PM_{2.5}$ or 15 tons per year of $PM_{10}$;

3. Contribute to CO concentrations exceeding the California Ambient Air Quality Standards (CAAQS) of nine ppm averaged over eight hours and 20 ppm for one hour;

4. For new sources of TACs, during either project construction or project operation expose sensitive receptors to substantial levels of TACs under project conditions resulting in (a) an increase in cancer risk level greater than 10 in 1 million, (b) an increase in non-cancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average $PM_{2.5}$ concentration of greater than 0.3 micrograms per cubic meter ($\mu g/m^3$); or, under cumulative conditions, during either project construction or project operation expose existing sensitive receptors to substantial levels of TACs resulting in (a) a cancer risk level greater than 100 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average $PM_{2.5}$ concentration of greater than 0.8 $\mu g/m^3$ [NOTE: Pursuant to the BAAQMD CEQA Guidelines, when siting new TAC sources consider receptors located within 1,000 feet. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers. The cumulative analysis should consider the combined risk from all TAC sources.];

5. Expose new sensitive receptors to substantial ambient levels of TACs associated with project construction or project operation resulting in (a) a cancer risk level greater than 10 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 1.0, or (c) annual average $PM_{2.5}$ concentration of greater than 0.3 $\mu g/m^3$; or, under cumulative conditions, expose new sensitive receptors to substantial ambient levels of TACs during either project construction or project operation resulting in (a) a cancer risk level greater than 100 in a million, (b) a non-cancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average $PM_{2.5}$ concentration of greater than 0.8 $\mu g/m^3$ [NOTE: Pursuant to the BAAQMD CEQA Guidelines, when siting new sensitive receptors consider TAC sources located within 1,000 feet including, but not limited to, stationary sources, freeways, major roadways (greater than 10,000 vehicles per day), truck distribution centers, airports, seaports, ferry terminals, and rail lines. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers.]; or

6. Frequently and for a substantial duration, create or expose sensitive receptors to substantial objectionable odors affecting a substantial number of people.

Specifically, Appendix G criterion (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" is addressed through the City's criteria 1, 2 and 3 above. Appendix G criterion (c) is addressed through the City's criteria 4 and 5 above and Appendix G criterion (d) is addressed through the City's criterion 6. In addition, the analysis below also addresses Appendix G air quality criterion (a) "Conflict with or obstruct implementation of the applicable air quality plan."

The City's thresholds of significance pertaining to air quality are generally based on the thresholds adopted by the BAAQMD in June 2010 and included in the 2017 Guidelines. Pursuant to CEQA, lead agencies must apply appropriate thresholds based on substantial evidence in the record. The City's thresholds rely upon the technical and scientific basis for BAAQMD's 2010 thresholds.

## Approach to Analysis

Project-related air quality impacts fall into two categories: short-term impacts due to construction, and long-term impacts due to project operation. During construction of the Project, criteria air pollutants would be generated primarily from the combustion of fuel in construction equipment and vehicle trips associated with worker commute, material delivery, and hauling. In addition, construction activities would affect local particulate concentrations due to fugitive dust generated from ground disturbance activities and vehicle travel on unpaved surfaces. The Project would be constructed over 17 months starting in the first quarter of 2024[5] and would involve demolition of several vacant existing buildings totaling 1.24 million square feet and the construction of a single building providing approximately 430,000 square feet of space.[6] The Project would also include offsite improvements to re-open Boehmer Street to create a new connection between 36th and 37th Avenues, and extend 37th Avenue south up to Alameda Avenue along the eastern boundary of the Project site.

Operational emissions from the Project would be generated primarily from increase in vehicle trips (primarily truck trips), operation of material handling equipment at the Project site, operation of the emergency backup generator for routine testing and maintenance, and other area sources (such as landscaping, use of architectural coatings for maintenance activities, etc.). The Project would not provide a natural gas connection consistent with the City of Oakland's Municipal Code Chapter 15.37 requiring all-electric construction in newly constructed buildings. Therefore, there would be no criteria air pollutant emissions associated with energy use in the Project building. Material handling equipment used within the warehouse building would be powered by propane while the yard tractors used in the trailer parking area would be diesel-fueled. The end user and nature of the use is unknown at this time but, for the purposes of this analysis, is assumed to be a distribution warehouse facility with no refrigeration.

[5] The analysis presented in this section assumes construction to begin in late 2022 and to be completed by mid-2024 as anticipated at the time the analysis was conducted. A later construction start date would result in lower emissions than presented in this analysis because emissions are expected to decrease over time due to improvements in technology and regulatory requirements.

[6] The analysis presented in this section assumes an approximately 427,000 square foot project building. The slightly larger proposed structure would not result in a meaningful increase in the estimates presented here. In addition, this Draft EIR assumes an approximately 430,000 square foot project building. Since the time of Draft EIR development, the Project Applicant has since put forth a revised proposal for an approximately 424,320 square foot project building. Therefore, this Draft EIR, including this Air Quality section, describes a modestly larger structure and thus serves as a conservative analysis.

## *Construction Impacts*

### Construction Criteria Air Pollutant Emissions

Criteria air pollutant emissions generated from construction activities include:

- Exhaust emissions from fuel combustion for mobile heavy-duty diesel and gasoline-powered equipment (including construction equipment, on-road haul trucks and vendor trucks and employee vehicles);
- Particulate matter from soil disturbance during site preparation and grading activities (also known as fugitive dust); and
- Evaporative emissions of ROG from paving activity and the application of architectural coatings.

Construction emissions were estimated using the latest version of the California Emissions Estimator Model (CalEEMod version 2020.4.0). CalEEMod is an emissions estimation/evaluation model that was developed in collaboration with the air quality management districts of California. Project-specific inputs to the model included types and sizes of land uses proposed for construction, site area, demolition area, infill and off-haul volumes, starting year of construction and construction schedule, duration of the various construction phases, types, number and activity level of equipment used under each phase as well as the number of worker and truck trips associated with each phase.

Total Project construction emissions as derived using CalEEMod are divided by the total number of workdays over the construction period (taking into account any overlapping phases) to derive average daily emissions. Estimated average daily construction-related emissions of criteria air pollutants are then compared to City's significance thresholds discussed above to determine significance of impacts.

All assumptions, calculations and CalEEMod inputs and outputs used in the estimation of construction emissions are included in Appendix C.

### Construction Health Risk

An HRA was completed to evaluate increase in health risks to nearby off-site receptors (i.e., residents) from exposure to construction TACs from the Project. The HRA focused on DPM emissions and estimated cancer risks, chronic health hazards, and $PM_{2.5}$ concentrations at off-site residences and schools/pre-schools located within 1,000 feet of the Project site. The HRA was conducted using guidelines from the BAAQMD, CAPCOA and OEHHA, and analyzes the potential health risk and hazard impacts at the receptor that would be exposed to the maximum risk and hazard.

For construction activities, DPM exposure represents the primary health hazard. As discussed earlier, DPM is a complex mixture of chemicals and particulate matter identified by the state as a TAC with potential cancer and chronic non-cancer effects. DPM emissions would be generated by the operation of off-road construction equipment (e.g., excavators, loaders, cranes, graders) and on-road diesel-fueled heavy-duty vehicles. Although other exposure pathways exist (i.e., ingestion, dermal contact), the inhalation pathway is the dominant exposure pathway from DPM

for both cancer risk and chronic non-cancer health effects. Consequently, the HRA only evaluates the inhalation cancer and chronic non-cancer effects of DPM inhalation.

Average annual DPM emissions for each year of construction of the Project were estimated based on CalEEMod outputs. Annual DPM emissions for each construction year were averaged over the number of construction workdays within each year to generate an annual DPM emission rate for each construction year. $PM_{10}$ is conservatively used as a surrogate for DPM. Similarly, exhaust $PM_{2.5}$ emission rates were also calculated for each construction year.

The AERMOD (version 18081) dispersion model was used to convert construction DPM and $PM_{2.5}$ emission rates derived above to annual DPM and $PM_{2.5}$ concentrations. A receptor grid was placed around the Project site to cover all sensitive receptors up to 1,000 feet from the Project site boundaries. In addition to residential receptors, the receptor grid includes schools and daycares. Modeling inputs and assumptions for the AERMOD run can be found in Appendix C. The annual concentration resulting from the dispersion modeling was applied to the yearly DPM and $PM_{2.5}$ emission rates estimated using CalEEMod, to represent the DPM and $PM_{2.5}$ concentrations at each receptor for each construction year.

Finally, the calculated DPM concentrations at the receptors for each construction year were applied to the OEHHA unit risk methodologies to calculate the potential increase in lifetime cancer risk, chronic non-cancer risk and $PM_{2.5}$ concentrations from the Project's construction activities over the construction duration (OEHHA, 2015). The maximum impacted receptor was identified and the estimated increase in lifetime cancer risk was compared to the City and BAAQMD project-level threshold of 10 in one million.

Non-cancer health hazards for chronic diseases are expressed in terms of a hazard index (HI), a ratio of TAC concentration to reference exposure level (REL), below which no adverse health effects are expected, even for sensitive individuals. OEHHA has recommended an ambient concentration of 5 $\mu g/m^3$ as the chronic inhalation REL for DPM exhaust. The maximum HI, calculated as the ratio of maximum annual DPM concentration to the REL is compared to the City and BAAQMD threshold of 1.0, to determine significance. The estimated maximum annual $PM_{2.5}$ concentrations is compared to the City and BAAQMD threshold of 0.3 $\mu g/m^3$ to evaluate impacts.

OEHHA equations and the health impact calculations are detailed in Appendix C.

## *Operational Impacts*

### Operational Criteria Air pollutants

Once operational, the Project would result in criteria air pollutant emissions from the following sources:

- Employee and truck trips generated by the Project uses
- Operation of material handling equipment at the warehouse
- Area sources
- Testing of the emergency generator.

Each of these sources is further discussed below.

**Mobile Sources.** Increased vehicle emissions associated with the Project would notably be from the truck traffic serving the Project uses and form a major source of operational emissions. The average daily trip generation data for truck trips and other vehicle trips were derived from the transportation analysis in Section 4.6, *Transportation and Traffic*. Although the Project would be a warehouse and is expected to generate large number of truck trips, the VMT assessment for the Project only includes the VMT generated by passenger vehicles and does not include the VMT generated by the trucks, consistent with SB743 requirements. Therefore, default trip lengths in CalEEMod were used. In addition to exhaust emissions, vehicles would also generate $PM_{10}$ and $PM_{2.5}$ emissions from entrained road dust and tire and brake wear.

**Material Handling Equipment.** Based on data provided by the Project Applicant, this analysis assumes the operation of five propane-fueled forklifts within the warehouse operating for 4 hours per day and two diesel-fueled yard tractors in the trailer parking area to the south of the warehouse operating eight hours per day. The warehouse is assumed to be operational 365 days a year.

**Area Sources.** CalEEMod defaults were used to estimate area source emissions from the Project's operational uses such as landscaping activities, use of consumer products such as cleaning products, and architectural coatings used in building maintenance.

**Emergency Generator.** The Project would include one 350 hp emergency generator, which would need to be tested regularly for maintenance. The emergency generator would be subject the BAAQMD's permitting requirements and testing would be limited to a maximum of one hour per day and 50 hours per year.

Operational emissions were estimated using the CalEEMod. Inputs and assumptions used in modeling are detailed in Appendix C.

Emissions from operations were assumed to occur 365 days a year (i.e., annual emissions were divided by 365 days to arrive at average daily emissions). Impacts were determined by comparing the Project emissions to the City's significance thresholds for operation detailed earlier.

### Operational Health Risk

Emissions of TACs, primarily DPM during operation, would result from heavy-duty truck trips generated by the Project, operation of diesel-fueled material handling equipment at the Project site and operation of the proposed emergency generator for testing and maintenance purposes. Truck trips to the Project site would be diesel-fueled and would expose receptors in the Project vicinity and along truck access routes to DPM emissions. Operational truck trips were modeled in AERMOD as three line-area sources:

- Along Alameda Avenue to High Street carrying 100 percent of the total inbound and outbound truck trips,
- Along Oakport Street from I-880 to High Street carrying 35 percent of the inbound truck traffic, and

- Along Coliseum Way from High Street to northbound I-880 carrying 35 percent of the outbound truck traffic.

Emissions from trucks idling at the Project site would be subject to CARB idling regulations per California Code of Regulations Section2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. The emergency generator was modeled as a point source (stack) conservatively placed closer to the northern side of the building. It was modeled as being vented through the rooftop of the 36 feet high warehouse building with a stack height of 3.66 meters and stack height of 0.183 meters (San Francisco Department of Public Health [SF DPH] & SF Planning, 2020).

Emissions generated from idling of trucks within the parking area and at the loading docks as well as the operation of the yard tractors to move parked trailers around was modeled as an area source. Concentrations modeled in AERMOD were used in conjunction with OEHHA risk assessment parameters to estimate operational health risks assuming an operational exposure of 30 years.

### *Consistency with Clean Air Plan*

As discussed above, the applicable air quality plan is the BAAQMD's 2017 CAP, which identifies measures to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce GHG emissions. Consistency with the CAP can be determined if a project were to support the goals of the plan, include applicable control measures from the plan and would not disrupt or hinder implementation of any plan control measures.

BAAQMD guidance states that lead agencies should consider three questions in assessing consistency with the 2017 CAP:

1. Would the project support the primary goals of the Clean Air Plan?
2. Does the project include applicable control measures from the Clean Air Plan?
3. Does the project disrupt or hinder implementation of control measures identified in the Clean Air Plan?

To support the primary goals, the CAP recommends specific control measures and actions. The 2017 CAP includes 85 control measures aimed at reducing air pollution in the SFBAAB. A tabular comparison of applicable control measures in the 2017 CAP and existing implementation mechanisms or elements of the Project was completed to determine whether the Project would support the primary goals of the 2017 CAP and whether the Project would include all applicable control measures. A qualitative assessment of whether the Project would disrupt or hinder implementation of any 2017 CAP control measure was also completed.

## *Non-CEQA Impacts of the Environment on the Project*

As discussed in the Regulatory Setting,[7] CEQA does not generally require lead agencies to consider how existing environmental conditions might impact a project's users or residents, except where the proposed project would exacerbate an existing environmental condition. Accordingly, the identified significance criteria related to exposure of sensitive receptors to substantial pollutant concentrations are valid only to the extent that the proposed project would in some way exacerbate air quality conditions. The Project does not introduce any new sensitive receptors on-site that would be exposed to existing emissions. Therefore, this is not discussed further in the analysis presented below.

## *Cumulative Impacts*

### Criteria Air Pollutants

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in a geographic area being in nonattainment of ambient air quality standards. Instead, in areas of nonattainment, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. If a project's contribution to the cumulative impact is considerable, then the project's cumulative impact on air quality would be considered significant. As it relates to the project area, the SFBAAB is in nonattainment for each of the criteria air pollutants, with each considered to be existing cumulatively significant adverse air quality impacts, against which the Air District must determine if emission of criteria air pollutants from the project, would have a cumulatively considerable effect. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels at which a project's individual emissions would be cumulatively considerable. Therefore, per the BAAQMD CEQA Guidelines, if a project exceeds the identified project-level significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. If a project generates emissions less than the identified significance thresholds, its emissions would not be considered cumulatively considerable, resulting in a less than significant adverse air quality impact to the region's existing air quality conditions.

### Cumulative Health Risk Assessment

The cumulative HRA includes a tabulation of risks from the construction and operation of the Project plus risks from off-site sources (stationary and mobile) in the vicinity of the Project's off-site Maximally Exposed Individual Receptor (MEIR). BAAQMD recommends that the cumulative health risk analysis include other air emissions sources within a "zone of influence" of 1,000 feet surrounding the Project site. As such, this evaluation includes combined health risks from all sources of TACs and $PM_{2.5}$ within 1,000 feet of the Project MEIR.

The BAAQMD recommends that sources screened for consideration in the cumulative analysis include BAAQMD-permitted stationary sources, roadways with more than 10,000 vehicles per

[7] *California Building Industry Association v. Bay Area Air Quality Management District,* 62 Cal.4th 369. Opinion Filed December 17, 2015.

day, highways, rail, major roadways and any other major source of emissions within the zone of influence. BAAQMD provides tools for screening background health risk impacts for permitted stationary sources, major roadways and highways, and rail. The cumulative analysis relies on these tools. BAAQMD's Health Risk Calculator with Distance Multipliers was used to determine the impact from each permitted source to the MEIR.

In addition, the cumulative analysis also considered health risks from future sources proposed as part of other projects within 1,000 feet of the Project site within both the cities of Oakland and Alameda. The Major Projects List provided by both the cities of Alameda and Oakland were consulted to identify future projects proposed within 1,000 feet of the Project site's boundaries. The total cumulative risks to the MEIR is compared to the City's cumulative health risk thresholds to determine significance of impacts.

## Topics Considered and No Impact Determined

The Project would have no impact to the following topic based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, this topic is not addressed further in this document for the following reasons:

- ***Health Risk Exposure to New Sensitive Receptors*** (Criterion 5). The Project would not introduce any land uses to the site that would be considered sensitive to air quality and health risk and thus would not introduce new sensitive receptors to the site. Therefore, there would be no impact related to this criterion.

## Project Impacts and Discussion

**Impact AIR-1: Project construction would not generate average daily emissions in excess of 54 pounds per day of ROG, $NO_X$, or $PM_{2.5}$ or 82 pounds per day of $PM_{10}$. (Criterion 1) (*Less than Significant with SCAs*)**

Project-related construction activities would generate air pollutant emissions from the use of heavy-duty construction equipment, truck trips transporting materials and equipment, and from construction workers traveling to and from the Project site. Mobile source emissions, primarily $NO_X$, would be generated from the use of equipment such as excavators, bulldozers, wheeled loaders, scrapers, and cranes during the demolition, grading, and site prep construction phases. During the finishing phases, paving operations and the application of asphalt, architectural coatings (i.e., paints) and other building materials would release ROG. Project-related demolition, excavation, grading, and other construction activities may also cause wind-blown dust that could contribute particulate matter into the local atmosphere. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions.

### Fugitive Dust

Project-related demolition, excavation, grading, and other construction activities may cause wind-blown dust that could contribute particulate matter into the local atmosphere. As discussed in the Environmental Setting section above, construction dust can be an irritant causing watering eyes or

irritation to the lungs, nose, and throat. Depending on exposure, adverse health effects can occur due to this particulate matter in general as well as due to specific contaminants such as lead or asbestos that may be constituents of dust.

The BAAQMD considers implementation of the best management practices (BMPs) as part of its recommended mitigation measures for fugitive dust sufficient to ensure that construction-related fugitive dust is reduced to a less-than-significant level, and thus does not have quantitative significance thresholds for fugitive dust from construction activities. The BAAQMD-recommended basic mitigation measures to reduce fugitive dust emissions are included as part of SCA AIR-1: Dust Controls – Construction Related. If the Project is approved by the City, SCA AIR-1 would be adopted as an enforceable condition of approval and required to be implemented during construction of the Project to help ensure less-than-significant impacts from fugitive dust. Therefore, required implementation of SCA AIR-1 as part of the Project would ensure compliance with BAAQMD's basic dust control mitigation measures and the impact of the Project's fugitive dust emissions would be less than significant.

### Criteria Air Pollutants

Construction-related criteria air pollutant emissions as estimated using CalEEMod are summarized in **Table 4.1-3**. Average daily emissions from Project construction were calculated by dividing the total emissions generated over the construction period by the total number of workdays. Estimates of PM include only exhaust emissions as the BAAQMD does not require inclusion of fugitive dust emissions in comparing Project construction emissions with recommended significance thresholds. Impacts from fugitive dust emissions are considered qualitatively as discussed above.

**TABLE 4.1-3**
**PROJECT AVERAGE DAILY CONSTRUCTION EMISSIONS**

| | Pounds per Day | | | |
|---|---|---|---|---|
| | **ROG** | **NOx** | **Exhaust $PM_{10}$** | **Exhaust $PM_{2.5}$** |
| Project Emissions | 10.9 | 9.3 | 0.3 | 0.3 |
| City and BAAQMD Significance Thresholds | 54 | 54 | 82 | 54 |
| Exceeds Threshold? | No | No | No | No |

NOTE: ROG = Reactive Organic Gases; NOx = Nitrogen Oxides; $PM_{10}$ = Particulate Matter less than 10 microns; $PM_{2.5}$ = Particulate Matter less than 2.5 microns.

SOURCE: Table compiled by Environmental Science Associates in 2023.

Estimated emissions, as shown in Table 4.1-3, do not exceed the City's significance thresholds for construction for any of the pollutants analyzed. In addition, the Project would be required to comply with SCA AIR-2: Criteria Air Pollutants – Construction Related which includes BMPs to reduce criteria air pollutants from construction equipment and vehicles. Therefore, criteria air pollutant impacts from Project construction would be less than significant.

**SCA AIR-1: Dust Controls – Construction Related.**

**SCA AIR-2: Criteria Air Pollutants – Construction Related.**

**Mitigation:** None required.

---

**Impact AIR-2: Project operation would not generate average daily emissions of 54 pounds per day of ROG, $NO_X$, or $PM_{2.5}$ or 82 pounds per day of $PM_{10}$; or result in maximum annual emissions of 10 tons per year of ROG, $NO_X$, or $PM_{2.5}$ or 15 tons per year of $PM_{10}$. (Criterion 2) (*Less than Significant*)**

Operation of the Project would result in an increase in criteria air pollutant and precursor emissions, including ROG, $NO_X$, $PM_{10}$ and $PM_{2.5.}$ Emissions would be generated from a variety of sources including onsite area sources (e.g., operation of landscape maintenance equipment, maintenance application of paint and other architectural coatings, use of consumer products such as cleaning products), operation of material handling equipment, routine testing of the proposed emergency generator, and on-road vehicle trips to and from the Project site.

As discussed above in the *Approach to Analysis* section above, operational emissions associated with the Project were calculated using the most recent version of the CalEEMod program using inputs detailed in Appendix C. **Table 4.1-4** presents the average daily unmitigated operational emissions of criteria air pollutants from the Project. The table also compares the Project emissions to the City's average daily and annual significance thresholds.

**TABLE 4.1-4**
**PROJECT AVERAGE DAILY AND ANNUAL OPERATIONAL EMISSIONS**

| | Operational Emissions | | | |
|---|---|---|---|---|
| | **ROG** | **NOx** | **Total $PM_{10}$** | **Total $PM_{2.5}$** |
| Area Sources | 10.9 | <0.01 | <0.01 | <0.01 |
| Energy Use | 0.0 | 0.0 | 0.0 | 0.0 |
| Mobile Sources | 4.4 | 36.0 | 11.5 | 3.3 |
| Offroad Equipment and Truck Idling | 1.0 | 11.8 | 0.1 | 0.1 |
| Emergency Generator Testing | 0.1 | 0.2 | 0.01 | 0.01 |
| ***Project Average Daily Emissions – Total*** | ***16.4*** | ***47.9*** | ***11.6*** | ***3.4*** |
| City/BAAQMD Significance Thresholds | 54 | 54 | 82 | 54 |
| Exceeds Threshold? | No | No | No | No |
| Project Annual Emissions | 2.8 | 6.6 | 2.1 | 0.6 |
| City/BAAQMD Significance Thresholds | 10 | 10 | 15 | 10 |
| Exceeds Threshold? | No | No | No | No |

NOTE: ROG = Reactive Organic Gases; NOx = Nitrogen Oxides; $PM_{10}$ = Particulate Matter less than 10 microns; $PM_{2.5}$ = Particulate Matter less than 2.5 microns.

SOURCE: Table compiled by Environmental Science Associates in 2023.

As shown in Table 4.1-4, the Project's operational emissions would not exceed City's mass average daily or annual significance thresholds for ROG, $NO_X$, $PM_{10}$, and $PM_{2.5}$. Thus, the Project would result in a less-than-significant impact with respect to operational emissions of ROG, $NO_X$, $PM_{10}$, and $PM_{2.5}$.

**Mitigation:** None required.

---

**Impact AIR-3: The Project would not contribute to CO concentrations that exceed the CAAQS of 9 ppm averaged over eight hours and 20 ppm for one hour. (Criterion 3) (*Less than Significant*)**

Regional ambient air quality monitoring data, including those presented in Table 4.1-1, demonstrate that CO concentrations within West Oakland and the air basin at large are well below standards, despite long-term upward trends in regional VMT. In recent years, the potential for localized increases in carbon monoxide concentrations from increased traffic has been greatly reduced due to improvements in vehicle exhaust controls since the early 1990s and the use of oxygenated fuels.

The BAAQMD's recommended approach for determining if a Project would contribute to CO concentrations exceeding the CAAQS of 9 ppm averaged over eight hours and 20 ppm for one hour is to use screening criteria. If the Project meets all of the BAAQMD's screening criteria, the Project would result in a less-than-significant impact to air quality with respect to local CO concentrations. Pursuant to the BAAQMD CEQA Guidelines' screening criteria for CO, localized CO concentrations should be estimated for projects in which (a) project-generated traffic would conflict with an applicable congestion management program established by the county congestion management agency or (b) project-generated traffic would increase traffic volumes at affected intersections to more than 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited, such as tunnels, parking garages, bridge underpasses, natural or urban street canyons, and below-grade roadways). In Oakland, only the MacArthur Maze portion of Interstate 580 exceeds the 44,000 vehicles per hour screening criteria, which is approximately two miles northwest of the Project site and would therefore not result in elevated CO concentrations at the Project site. Further, ambient CO standards have not been exceeded in the Bay Area for over a decade, largely due to reformulated fuels in California and vehicle emissions controls, as discussed above. Therefore, development under the Project would not be required to estimate localized CO concentrations as it would not contribute to CO concentrations exceeding CAAQS. The impact would be less than significant and no mitigation measures are required.

**Mitigation:** None required.

---

**Impact AIR-4: The Project would not create new sources of TACs during Project construction or operation that would expose existing sensitive receptors in the vicinity to health risk levels in excess of the City's project-level thresholds. (Criterion 4) (*Less than Significant with SCAs*)**

As discussed earlier, the Project would generate TACs primarily in the form of DPM, during both construction and operation. An HRA was prepared to evaluate the increase in health risks to nearby receptors from exposure to Project construction and operational emissions. In addition, exposure to asbestos in the existing structures during demolition activities could also expose workers and nearby residents to health risks. Asbestos is designated as a TAC by CARB.

### Construction

**Table 4.1-5** presents the maximum health risks from exposure to uncontrolled DPM and $PM_{2.5}$ emissions from Project construction. The table includes lifetime excess cancer risk (chances per million), chronic HI, and average annual $PM_{2.5}$ concentration at the maximally impacted residential and school receptors.

**TABLE 4.1-5**
**PROJECT CONSTRUCTION HEALTH RISKS**

| | Health Risks | | |
|---|---|---|---|
| | **Lifetime Excess Cancer Risk, chances per million** | **Hazard Index, unitless** | **Annual Average $PM_{2.5}$ Concentration, $\mu g/m^3$** |
| Resident - Infant | 4.7 | 0.013 | 0.01 |
| School Receptor - Child | 0.03 | <0.001 | <0.01 |
| BAAQMD Significance Thresholds | 10 | 1.0 | 0.3 |
| Exceeds Threshold? | No | No | No |

NOTE: $\mu g/m^3$ = micrograms per cubic meter

SOURCE: Table compiled by Environmental Science Associates in 2023.

The maximum impacted residential receptor from Project construction emissions would be at Universal Transverse Mercator (UTM) (568132.3, 4180726.9) at 3413 Elmwood Avenue and the maximum impacted school receptor would be at Ascend Elementary School.

As shown in Table 4.1-5, the increase in lifetime cancer risk, non-cancer risk (HI) and $PM_{2.5}$ annual average concentration from exposure to uncontrolled Project construction emissions would be less than the respective City's project-level thresholds at both the maximum impacted residential and school receptors. Therefore, health risk impacts of Project construction would be less than significant.

Impacts from asbestos exposure during demolition activities would be reduced to a less than significant level with the required implementation of SCA AIR-6, Asbestos in Structures as part of the Project would ensure compliance with CARB and BAAQMD requirements and result in a less-than-significant impact.

### Operation

**Table 4.1-6** presents the maximum health risks from exposure to uncontrolled DPM and $PM_{2.5}$ emissions from Project operation.

**TABLE 4.1-6**
**PROJECT OPERATIONAL HEALTH RISKS**

| | Health Risks | | |
|---|---|---|---|
| | **Lifetime Excess Cancer Risk, chances per million** | **Hazard Index, unitless** | **Annual Average $PM_{2.5}$ Concentration, $\mu g/m^3$** |
| Resident - Infant | 3.1 | 0.001 | 0.01 |
| School Receptor - Child | 0.1 | <0.001 | <0.01 |
| BAAQMD Significance Thresholds | 10 | 1.0 | 0.3 |
| Exceeds Threshold? | No | No | No |

NOTE: $\mu g/m^3$ = micrograms per cubic meter

SOURCE: Table compiled by Environmental Science Associates in 2023.

The maximum impacted residential receptor from Project operational emissions would be at Universal Transverse Mercator (UTM) (568232.3, 4180686.9) located along 36th Avenue to the north of the Project site and the maximum impacted school receptor would be at Ascend Elementary School.

As shown in Table 4.1-6, the increase in lifetime cancer risk, non-cancer risk (HI) and $PM_{2.5}$ annual average concentration from exposure to uncontrolled Project operational emissions would be less than the respective project-level City thresholds at both the maximum impacted residential and school receptors. Therefore, health risk impacts of Project construction would be less than significant. The Project would be required to comply with SCA AIR-4, Stationary Sources of Air Pollution – Toxic Air Contaminants and SCA AIR-5, Truck-Related Risk Reduction Measures – Toxic Air Contaminants to reduce risks from stationary sources of pollution and truck activity. This HRA satisfies requirement a) of SCA AIR-3, Diesel Particulate Matter Controls – Construction Related.

**SCA AIR-3: Diesel Particulate Matter Controls – Construction Related.**

**SCA AIR-4: Stationary Sources of Air Pollution - Toxic Air Contaminants.**

**SCA AIR-5: Truck-Related Risk Reduction Measures – Toxic Air Contaminants.**

**SCA AIR-6: Asbestos in Structures.**

**Mitigation:** None required.

**Impact AIR-5: The Project would not create or expose sensitive receptors to substantial odors affecting a substantial number of people. (Criterion 6) (*Less than Significant*)**

The use of diesel-fueled heavy equipment for Project construction could potentially create objectionable odors that may affect receptors in the immediate vicinity. Construction-related odors would be localized and temporary and the use of low-VOC surface coating materials in accordance with BAAQMD Rules and Regulations would reduce potentially objectionable odors from painting operations. Construction odor would disperse rapidly with distance and is not anticipated to be perceptible beyond the Project site boundaries.

The Project would not include any operational sources of odor that receptors in the vicinity may find objectionable. This impact would therefore be less than significant.

**Mitigation:** None required.

---

**Impact AIR-6: Construction and operation of the Project would not conflict with or obstruct implementation of the applicable air quality plan. (Appendix G criterion a) (*Less than Significant with SCAs*)**

The most recently adopted air quality plan for the SFBAAB is the 2017 CAP. The 2017 CAP is a road map that demonstrates how the Bay Area will implement all feasible measures to attain ambient air quality standards in accordance with the requirements of the California CAA. It also provides a control strategy to reduce ozone, PM, air toxics, and GHGs.

BAAQMD recommends that consistency of a project with the applicable air quality plan be determined with respect to the following considerations.

- Support the primary goals of the CAP;
- Include applicable control measures from the CAP; and
- Avoid disrupting or hindering implementation of control measures identified in the CAP.

The primary goals of the 2017 CAP are to attain air quality standards, reduce population exposure to air pollutants, to protect public health in the Bay Area, and to reduce GHG emissions and protect the climate. Any project that would not support these goals would not be considered consistent with the 2017 CAP. The recommended measure for determining project support of these goals is consistency with BAAQMD-approved CEQA thresholds of significance. Therefore, if the Project would not result in significant and unavoidable air quality impacts, after the application of all SCAs and feasible mitigation, it would be considered consistent with the 2017 CAP.

As discussed in detail under Impacts AIR-1 and AIR-2 above, the Project would not result in emissions exceeding the applicable BAAQMD thresholds either during construction or operation. Therefore, the Project would be considered to support the primary goals of the 2017 CAP.

The 2017 CAP includes 85 control measures aimed at reducing air pollutants and GHGs in the SFBAAB. These control measures are grouped into various categories and include stationary- and area-source measures, mobile-source measures, transportation control measures, land use measures, and energy and climate measures. The CAP recognizes that, to a great extent, community design dictates individual travel mode and that a key long-term control strategy to reduce emissions of criteria pollutants, air toxics, and GHG emissions from motor vehicles is to channel future Bay Area growth into communities where goods and services are located nearby and people have a range of viable transportation options. Many of the CAP measures address stationary sources and will be implemented by BAAQMD using its permit authority, and therefore, are not suited for implementation through project approval actions. The measures that are appropriate for implementation through project approvals are identified below.

**Table 4.1-7** identifies the 2017 CAP measures that may apply to the Project. This table identifies each applicable control strategy and correlates it with specific elements of the Project to determine consistency.

As demonstrated in Table 4.1-7, with the required implementation of City SCAs, the Project would be consistent with all applicable control measures in the 2017 CAP.

The Project involves development to the existing site that is zone for industrial uses and would not cause the disruption, delay, or otherwise hinder the implementation of any air quality plan control measure.

The proposed Project would maintain the existing character of the area with availability of local transit. It would not preclude the extension of a transit line or a bike path or any other transit improvement. Thus, the Project would not disrupt or hinder implementation of control measures identified in the 2017 CAP.

**SCA AIR-1: Dust Controls – Construction Related.**

**SCA AIR-2: Criteria Air Pollutants – Construction Related.**

**SCA TRANS-3: Transportation and Parking Demand Management.** (See Section 4.6)

**Mitigation:** None required.

**TABLE 4.1-7**
**PROJECT CONSISTENCY WITH POTENTIALLY APPLICABLE 2017 CLEAN AIR PLAN CONTROL MEASURES**

| 2017 CAP Control Measure | Measure Description | Existing or Proposed Implementation Mechanism | Project Consistent with Measure? |
|---|---|---|---|
| SS21—New Source Review of Toxic Air Contaminants | SS21 requires a health impact review for new and modified sources that emit toxic air contaminants (TACs) in excess of trigger levels as regulated by BAAQMD Regulation 2, Rule 5 (Rule 2-5). It also establishes risk thresholds for mitigation and permit approval. | The Project would include a new emergency generator which would be required to comply with all applicable rules of BAAQMD Regulation 2 including Rules 1, 2 and 5. | Yes. |
| SS25—Coatings, Solvents, Lubricants, Sealants and Adhesives | SS25 will reduce emissions of ROG from architectural coatings and other materials by proposing more stringent ROG limits as appropriate. | The Project would comply with all applicable BAAQMD rules and regulations regarding ROG emission limits. | Yes. |
| SS36—Particulate Matter from Trackout | SS36 developed Regulation 6, Particulate Matter; Rule 6: Trackout (Rule 6-6) to address mud and dirt that can be "tracked out" from construction sites, bulk material storage, and disturbed surfaces onto public paved roads where vehicle traffic will pulverize the mud and dirt into fine particles and entrain them into the air. | Construction activities associated with the Project would implement BMPs required by the BAAQMD, as part of SCA AIR-1, which would reduce trackout. | Yes, with implementation of SCA AIR-1 |
| SS38—Fugitive Dust | SS38 reduces particulate matter ($PM_{10}$ & $PM_{2.5}$) fugitive dust emissions from traffic and other operations on construction sites, large disturbed surfaces, and other sources of fugitive PM emissions. | Construction activities associated with the Project would implement dust control BMPs required by the BAAQMD as part of SCA AIR-1. | Yes, with implementation of SCA AIR-1. |
| TR3—Local and Regional Bus Service | TR3 aims to reduce emissions by improving existing transit service in the region's core transit systems, and include new bus rapid transit lines in San Francisco, Oakland and Santa Clara County. | The Project is located within the Fruitvale and Dimond Areas Priority Development Area (PDA) as defined by Plan Bay Area and is therefore consistent with the region's Sustainable Communities Strategy. Existing transit service to the Project site is provided by AC Transit Lines 19, 51A and O to the bus stop located on Fruitvale Avenue, approximately 0.2 miles north of the Project site. The Applicant would also be required to provide subsidized transit passes to employees as part of the mandatory TDM Plan. | Yes. |
| TR5—Transit Efficiency and Use | TR5 will improve transit efficiency and make transit more convenient for riders through continued operation of 511 Transit, full implementation of Clipper® fare payment system and the Transit Hub Signage Program. | Existing transit service to the Project site is provided by AC Transit Lines 19, 51A and O to the bus stop located on Fruitvale Avenue, approximately 0.2 miles north of the Project site. The Clipper® fare payment system can be used on AC Transit, and routes and schedules are available on 511 Transit. | Yes. |

**TABLE 4.1-7 (CONTINUED)**
**PROJECT CONSISTENCY WITH POTENTIALLY APPLICABLE 2017 CLEAN AIR PLAN CONTROL MEASURES**

| 2017 CAP Control Measure | Measure Description | Existing or Proposed Implementation Mechanism | Project Consistent with Measure? |
|---|---|---|---|
| TR8—Ridesharing | TR8 will promote ridesharing services and incentives through the implementation of the 511 Regional Rideshare Program, as well as local rideshare programs implemented by Congestion Management Agencies. These activities will include marketing rideshare services, operating a rideshare information call center and website, and provide vanpool support services. In addition, this measure includes provisions for encouraging car sharing programs. | Ridesharing services to the Project site are available through the 511 Regional Rideshare Program as well as other private rideshare programs. | Yes. |
| TR9—Bicycle and Pedestrian Access and Facilities | The bicycle component of TR9 strives to expand bicycle facilities serving employment sites, educational and cultural facilities, residential areas, shopping districts, and other activity centers. Typical improvements include bike lanes, routes, paths, and bicycle parking facilities. The bicycle component also includes a bike share pilot project that was developed to assess the feasibility of bicycle sharing as a first- and last-mile transit option.<br><br>The pedestrian component of this measure is intended to improve pedestrian facilities and encourage walking by funding projects that improve pedestrian access to transit, employment sites, and major activity centers. Improvements may include sidewalks/paths, benches, reduced street width and intersection turning radii, crosswalks with activated signals, curb extensions/bulbs, buffers between sidewalks and traffic lanes, and street trees. | The Project would add sidewalks on both sides on the re-opened Boehmer Street between 36th and 37th Avenues, and the extended 37th Avenue from the current cul-de-sac south of Boehmer Street to Alameda. It would also include sidewalks on both sides of the relocated portion Alameda Avenue along the Project frontage. It would also provide a 12-foot Class I shared-used path on the south side of the street adjacent to the Estuary, which would be part of the San Francisco Bay Trail, and a Class 2B buffered bicycle lanes in both directions. | Yes. |
| TR13—Parking Policies | This control measure encourages parking policies and programs in local plans, e.g., reduce minimum parking requirements; limit the supply of off-street parking in transit-oriented areas; unbundle the price of parking spaces; support implementation of demand-based pricing in high-traffic areas. | The Project provides parking in excess of both the minimum parking required by the City for the site as well as the parking demand for the Project. However, the Project is required to implement mandatory TDM measures (SCA TRANS-3) with the goal to achieve 20 percent vehicle trip reduction, which would support compliance with this control measure (see Appendix K). | Yes. |

**TABLE 4.1-7 (CONTINUED)**
**PROJECT CONSISTENCY WITH POTENTIALLY APPLICABLE 2017 CLEAN AIR PLAN CONTROL MEASURES**

| 2017 CAP Control Measure | Measure Description | Existing or Proposed Implementation Mechanism | Project Consistent with Measure? |
|---|---|---|---|
| TR14—Cars and Light Trucks | This control measure summarizes actions by the BAAQMD, MTC, local businesses, city and county governments, and state and federal agencies to expand the use of Zero Emission Vehicles and Plug-in Electric passenger vehicles and light-duty trucks within the Bay Area. | Consistent with efforts by the BAAQMD, MTC and the City of Oakland's municipal code to expand the use of Zero Emissions Vehicles, the Project would designate a minimum of 10 percent of total parking spaces as "EV Ready" for the future installation of chargers. An additional 10 percent of the spaces will be required to be wired for future EV charging with any inaccessible conduits installed at the time of construction. | Yes. |
| TR22—Construction, Freight and Farming Equipment | TR22 directs the BAAQMD to work to reduce emissions from off-road equipment used in the construction, freight handling and farming industries by pursuing the following strategies: (1) offering financial incentives between 2017 and 2030 to retrofit engines with diesel particulate filters or upgrade to equipment with electric or Tier IV off-road engines; (2) work with the California Air Resources Board, the California Energy Commission and others to develop more fuel-efficient off-road engines and drive trains; and (3) work with local communities to encourage use of renewable electricity and fuels. | As shown in Table 4.1-3, the Project's average daily construction emissions would be less than the City's project level thresholds for ROG, NOx, exhaust PM10 and exhaust $PM_{2.5}$. The Project would further reduce emissions from off-road construction equipment through the implementation of SCA AIR-2, Criteria Air Pollutants, which would require best management practices to be implemented. | Yes. |
| EN2—Decrease Energy Use | EN2 would decrease electricity demand through the adoption of additional energy efficiency policies and programs. | The Project building would be compliant with the most recent 2019 Title 24 standards and would obtain a LEED Silver certification. In addition, almost all of the SCAs identified in Air Quality and GHG sections and many of the SCAs identified in the Transportation and Circulation section would also reduce energy use. | Yes. |
| BL1—Green Buildings | BL1 seeks to increase energy efficiency and the use of on-site renewable energy—as well as decarbonize existing end uses—for all types of existing and future buildings. | Consistent with City ordinance 13632, the Project would be constructed as all-electric building with no natural gas infrastructure. In addition, the Project would be consistent with the 2019 Title 24 standards for energy efficiency which includes mandatory "solar-ready" requirements for non-residential buildings. | Yes. |
| BL2—Decarbonize Buildings | BL2 seeks to reduce greenhouse gas emissions, criteria pollutants and TACs by limiting the installation of space- and water-heating systems and appliances powered by fossil fuels. | Consistent with City ordinance 13632, new construction associated with the Project would be all-electric and would reduce GHG emissions, criteria pollutants and TACs. Natural gas infrastructure would not be provided to the Project site. | Yes. |

SOURCE: Table complied by Environmental Science Associates in 2022 based on BAAQMD, 2017b.

## 4.1.5 Cumulative

The geographic scope for cumulative effects on air quality is within the SFBAAB. Localized impacts such as health risk consider sources and other cumulative projects within a 1,000-foot zone of influence as defined by the BAAQMD.

Impact AIR-6 above, addresses potential impacts with respect to the Project's consistency with the BAAQMD 2017 CAP (Appendix G criterion a). Because the 2017 CAP focuses on reducing population exposure to air pollutants throughout the region, the assessment in Impact AIR-6 is a cumulative analysis as it assesses consistency with a region wide air quality plan. Therefore, a separate cumulative assessment of consistency with the 2017 CAP is not required.

**Impact AIR-1.CU: Construction and operational activities associated with the Project would not result in a cumulatively considerable increase in emissions for which the SFBAAB is in non-attainment under an applicable federal or State ambient air quality standard. (Criteria 1 and 2) (*Less than Significant with SCAs*)**

As discussed earlier, the SFBAAB is a non-attainment area for ozone, $PM_{10}$ and $PM_{2.5}$ under federal and state air quality standards. Therefore, a significant cumulative air quality impact exists. The analysis below focuses on the potential for the Project's construction and operational activities to result in a cumulatively considerable contribution of emissions of ROG and NOx (ozone precursors) as well as $PM_{10}$ and $PM_{2.5}$. Construction-related emissions of these pollutants would be considered cumulatively considerable if the estimated average daily emissions from these activities would exceed emission thresholds set forth by BAAQMD.

The BAAQMD's thresholds of significance for both construction and operation adopted by the City were developed with consideration of individual project emission levels that would be cumulatively considerable. If a project exceeds the identified project significance levels, then its emissions would also be cumulatively considerable. The analysis in Impact AIR-1 demonstrates that, with implementation of SCAs AIR-1 and AIR-2, the Project's construction emissions would not exceed the City and BAAQMD's project-level emission thresholds for ROG, $NO_X$, $PM_{10}$ or $PM_{2.5}$. Likewise, the analysis under Impact AIR-2 shows that the Project's operational emissions would not exceed emission thresholds for ROG, $NO_X$, $PM_{10}$ or $PM_{2.5}$. Therefore, the Project's contribution to the cumulative air quality impact of the area would be less than significant during both construction and operation.

**SCA AIR-1: Dust Controls – Construction Related.**

**SCA AIR-2: Criteria Air Pollutants – Construction Related.**

**Mitigation:** None required.

**Impact AIR-2.CU: The Project would not contribute to cumulative CO concentrations that exceed the CAAQS of 9 ppm averaged over eight hours and 20 ppm for one hour. (Criterion 3) (*Less than Significant*)**

Monitored levels of CO throughout the Bay Area are well below state and national ambient air quality standards, despite long-term upward trends in regional VMT. Based on the BAAQMD's screening criteria for CO analysis, increase in traffic volumes at affected intersections to more than 44,000 vehicles per hour could result in an exceedance of the standards. Project plus cumulative traffic at all intersections affected by the Project would be well below this level resulting in a less than significant cumulative impact.

**Mitigation:** None required.

---

**Impact AIR-3.CU: Construction and operational activities associated with the Project would not contribute considerably to cumulative emissions of TACs and $PM_{2.5}$ that could expose sensitive receptors to substantial pollutant concentrations or health risks above the City's cumulative thresholds. (Criterion 4) (*Less than Significant with SCAs*)**

In addition to a project's individual TAC/health risk impacts during construction and operation, consistent with BAAQMD recommendations, the City's Criterion 4 requires evaluation of the potential cumulative health risks to existing sensitive receptors from existing and reasonably foreseeable future sources of TACs in addition to health risks from the Project. The method for determining cumulative health risk requires the tallying of health risk from permitted stationary sources, major roadways, and any other identified substantial sources of TACs in the vicinity of a project site (i.e., within a 1,000-foot radius) and then adding the individual sources to determine whether the City's cumulative health risk thresholds are exceeded.

As the Project does not include sensitive receptors, a cumulative screening analysis was conducted for the residential MEIR identified in the construction HRA for the Project. Health risks from permitted stationary sources within 1,000 feet of the MEIR were obtained from BAAQMD's Stationary Sources Risk and Hazards web tool. Background health risks from highway, rail, and major roadways were also obtained from BAAQMD. In addition, the cumulative analysis also considered future sources, primarily emergency generators, proposed as part of projects within 1,000 feet of the MEIR within the City of Oakland. The City of Alameda is located more than 1,000 feet from the MEIR. Based on the City of Oakland Planning Bureau's major projects' list, there are no future projects proposed within 1,000 feet of the project's MEIR that could contribute to cumulative health risk. **Table 4.1-8** shows the cumulative health risks to the residential MEIR from the various sources.

**TABLE 4.1-8**
**CUMULATIVE HEALTH IMPACTS TO OFF-SITE MEIR**

| Source | Source Type | Distance to MEIR (feet) | Cancer Risk (persons per million) | Chronic Hazard Impact | $PM_{2.5}$ Concentration ($\mu g/m^3$) |
|---|---|---|---|---|---|
| **Existing Permitted Stationary Sources (BAAQMD Plant Number) within 1,000 feet** | | | | | |
| The Home Depot (3490) | Generators | 330 | 0.36 | 0.00 | 0.00 |
| **Proposed Projects within 1,000 feet[a]** | | | | | |
| None | | | | | |
| **Mobile Sources** | | | | | |
| | | Highways | 40.5 | -- | 0.62 |
| | | Major Roadways | 11.0 | -- | 0.02 |
| | | Railroad | 3.3 | -- | 0.04 |
| **Project Sources** | | | | | |
| | | Project Construction | 4.6 | <0.1 | <0.1 |
| | | Project Generator Operation | 3.2 | <0.1 | <0.1 |
| | | **Cumulative Impacts[b]** | **63.0** | **0.02** | **0.68** |
| | | City of Oakland Cumulative Significance Threshold | 100 | 10 | 0.8 |
| | | Exceeds Cumulative Significance Thresholds? | No | No | No |

NOTES:
[a] Risks posed by the generators are conservatively assumed to be at the maximum permitted value, but would likely be less.
[b] Cumulative totals may not add up due to rounding.

SOURCE: Appendix C.

The screening analysis shows that health risks to the receptors in the Project vicinity would be less than the City's cumulative thresholds and thus, less than significant.

**SCA AIR-3: Diesel Particulate Matter Controls – Construction Related.**

**SCA AIR-4: Stationary Sources of Air Pollution - Toxic Air Contaminants.**

**SCA AIR-5: Truck-Related Risk Reduction Measures – Toxic Air Contaminants.**

**SCA AIR-6: Asbestos in Structures.**

**Mitigation:** None required.

---

**Impact AIR-4.CU: The Project, in combination with other cumulative projects, would not create or expose sensitive receptors to substantial odors affecting a substantial number of people. (Criterion 6) (*Less than Significant*)**

Odors generated by individual projects from the combustion of diesel in construction equipment would be localized and short-term in nature and hence less than significant. Besides, there are no cumulative projects in the vicinity of the Project site. The Project would not include any operational sources of odor that receptors in the vicinity may find objectionable, nor are there any

existing or proposed sources of odor in the Project vicinity that would lead to a cumulative odor impact. This impact would therefore be less than significant.

**Mitigation:** None required.

## 4.1.6 References

Bay Area Air Quality Management District (BAAQMD). 2017a. *California Environmental Quality Act Air Quality Guidelines.* May 2017. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

BAAQMD. 2017b. *Clean Air Plan, Spare the Air, Cool the Climate*. April 19, 2017. Accessed December 2020. https://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. 2017c. *Air Quality Standards and Attainment Status*. Updated January 5, 2017. Accessed April 24, 2022. https://www.baaqmd.gov/about-air-quality/research-and-data/air-quality-standards-and-attainment-status.

BAAQMD. 2022. *Stationary Source Screening Map*. updated 2018. Accessed April 2022. https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3.

CARB. 1998. *Report to the Air Resources Board on the Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant*. April 22, 1998. Accessed April 2022. https://ww2.arb.ca.gov/sites/default/files/classic/toxics/dieseltac/part_a.pdf?_ga=2.152804090.2137726386.1650827342-1245246421.1562184877.

CARB. 2021. CARB Identified Toxic Air Contaminants. Accessed April 2022. https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants.

CARB. 2022a. Ozone & Health. Accessed April 2022. https://ww2.arb.ca.gov/resources/ozone-and-health.

CARB. 2022b. Nitrogen Dioxide & Health. Accessed April 2022. https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health.

CARB. 2022c. Carbon Monoxide & Health. Accessed April 2022. https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health.

CARB. 2022d. iADAM Air Quality Data Statistics, Top 4 Summary: Top 4 Measurements and Days Above the Standard. Accessed April 2022. https://www.arb.ca.gov/adam/topfour/topfour1.php.

City of Oakland. 1996. *Open Space, Conservation and Recreation (OSCAR) Element of the Oakland General Plan*. 1996. Accessed April 2022. https://cao-94612.s3.amazonaws.com/documents/oak035254.pdf.

City of Oakland. 2005. *Ordinance No. 12658 – Adopt an Ordinance Establishing Green Building (E.g., Sustainable Site Development, Water Savings, Energy Efficiency Materials Selection and Indoor Environmental Quality) Requirements for Certain City Projects*. May 17, 2005. Accessed March 2022. https://cao-94612.s3.amazonaws.com/documents/Green-Building-Ordinance-12658_CMS.pdf.

City of Oakland. 2007a. *Land Use and Transportation Element of the Oakland General Plan*. March 24, 1998, amended June 21, 2007. Accessed April 2022. https://www.oaklandca.gov/resources/land-use-and-transportation-element.

City of Oakland. 2007b. *Oakland City Planning Commission Staff Report*. September 9, 2007. Accessed March 2022. http://www2.oaklandnet.com/oakca1/groups/ceda/documents/webcontent/dowd009191.pdf.

City of Oakland. 2020a. *Resolution Adopting the 2030 Oakland Equitable Climate Action Plan*. July 28, 2020. Accessed April 2022. https://cao-94612.s3.amazonaws.com/documents/Council-Resolution-88267-Adoption-of-2030-ECAP.pdf.

City of Oakland. 2020b. A Resolution of the Oakland City Council to Adopt a Goal to Achieve Carbon Neutrality by 2015, Resolution No. 88268. July 28, 2020. Accessed April 2022. https://cao-94612.s3.amazonaws.com/documents/Council-Resolution-88268-Adoption-of-2045-Carbon-Neutrality-Goal.pdf.

Metropolitan Transportation Commission (MTC). 2022. Priority Development Areas (Plan Bay Area 2050). Accessed April 2022. https://opendata.mtc.ca.gov/datasets/priority-development-areas-plan-bay-area-2050/explore?location=37.476065%2C-122.151715%2C12.06.

MTC and Association of Bay Area Governments (ABAG). 2013. *Bay Area Plan – Strategy for A Sustainable Region*. July 13, 2013. Accessed April 2022. http://files.mtc.ca.gov/pdf/Plan_Bay_Area_FINAL/Plan_Bay_Area.pdf.

MTC and ABAG. 2017. *Plan Bay Area 2040*. Adopted July 26, 2017. Accessed April 2022. https://mtc.ca.gov/sites/default/files/Final_Plan_Bay_Area_2040.pdf.

MTC and ABAG. 2021. *Plan Bay Area 2050*. Adopted October 21, 2021. Accessed April 2022. https://planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf.

Occupational Safety and Health Administration (OSHA). 2011. *Indoor Air Quality in Commercial and Institutional Buildings*. 2011. Accessed April 2022. https://www.osha.gov/sites/default/files/publications/3430indoor-air-quality-sm.pdf.

Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Guidance Manual for Preparation of Health Risk Assessments*. February 2015. Accessed April 2022. https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

OEHHA. 2021. CalEnviroScreen 4.0 Mapping Tool. Accessed May 2022. https://oehha.ca.gov/calenviroscreen/maps-data.

San Francisco Department of Public Health (SFDPH) and San Francisco Planning Department (SF Planning). 2020. *The San Francisco Citywide Health Risk Assessment: Technical Support Documentation*. February 2020. Accessed October 2021. https://www.sfdph.org/dph/files/EHSdocs/AirQuality/Air_Pollutant_Exposure_Zone_Technical_Documentation_2020.pdf.

U.S. Environmental Protection Agency (EPA). 2002. *Health Assessment Document for Diesel Engine Exhaust*. May 2002. Accessed April 2022. https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=29060.

U.S. EPA. 2021a. Health Effects of Ozone Pollution. Last updated May 5, 2021. Accessed April 2022. https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution.

U.S. EPA. 2021b. Nitrogen Dioxide ($NO_2$) Pollution. September 8, 2016; last updated June 7, 2021. Accessed April 2022. https://www.epa.gov/no2-pollution/basic-information-about-no2.

U.S. EPA. 2021c. Carbon Monoxide (CO) Pollution in Outdoor Air. Last updated June 7, 2021. Accessed April 2022. https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution.

U.S. EPA. 2022. Sulfur Dioxide ($SO_2$) Pollution. June 28, 2018; last updated March 9, 2022. Accessed April 2022. https://www.epa.gov/so2-pollution/sulfur-dioxide-basics.

This page intentionally left blank

# 4.2 Biological Resources

## 4.2.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts related to biological resources. The section first includes a description of the existing environmental setting as it relates to biological resources in the Project vicinity and provides a regulatory framework that discusses applicable state and local regulations. The section then includes an evaluation of potential impacts of the Project related to biological resources and identifies mitigation measures that would reduce any significant impacts.

The information and analysis in this section is based on a review of the Project, applicable local policies, and goals and policies related to the protection of biological resources in the City of Oakland General Plan.

This section uses the following terms:

- **Project area:** This area is synonymous with the limits of work (e.g., ground disturbance) and includes work in the public right-of-way just outside of the Project site boundaries. It defines the area in which direct and indirect impacts on biological resources could occur.
- **Study area:** The study area is the Project area plus a 250-foot buffer, which encompasses the area within which indirect impacts on biological resources could occur (e.g., disturbance from light or noise).

## 4.2.2 Environmental Setting

### Regional and Local Setting

The Project area is in the San Francisco Bay Bioregion, which has a mild Mediterranean climate with generally warm, dry summers and cool, wet winters. This region includes marine, freshwater, and terrestrial resources from Point Arena to the Santa Cruz Mountains and extends from the continental shelf to the delta of the Sacramento and San Joaquin Rivers (USGS, 2017).

The Project area is predominantly flat and is currently occupied by the former Owens-Brockway Glass manufacturing facility. The site is built out, has minimal vegetation, and has been in continuous heavy industrial use since 1938, until the cessation of glass manufacturing operations in 2015. The Project area is mostly covered by existing structures and paving with little existing vegetation. There are nine trees in the Project area, including five Chinese Elms at the existing facility entrance along Alameda Avenue, at the west edge, a small Blackwood Acacia near the corner of Alameda and Fruitvale Avenues, a Monterey Pine and California Sycamore at 37th Avenue near its intersection with Alameda Avenue, and one Monterey Pine in the interior between buildings (see Appendix D). A row of street trees lines the east side of 37th Avenue and extends along the Project boundary to Alameda Avenue. The setting around the Project area is similarly urbanized, including industrial and commercial enterprises, residences, parking lots and roads to the northwest, northeast, and southeast. The Oakland Estuary, which is bordered by a narrow (30-foot) band of riprap and upland habitat, is present immediately southwest of Alameda Avenue.

Developed habitat provides little habitat for wildlife; however, common wildlife such as house mouse (*Mus musculus*), raccoon (*Procyon lotor*), and Virginia opossum (*Didelphis virginiana*) could use these areas to forage for human food waste, shelter from predators and weather, or disperse. Birds commonly found in such areas include non-native species, such as house sparrow (*Passer domesticus*), rock pigeon (*Columba livia*), and European starling (*Sturnus vulgaris*), as well as native species habituated to human disturbance, including Anna's hummingbird (*Calypte anna*), bushtit (*Psaltriparus minimus*), dark-eyed junco (*Junco hyemalis*), house finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), and California towhee (*Melozone crissalis*). These species may disperse, forage, or nest in the trees and landscape vegetation in the Project area. The Oakland Estuary provides resting and foraging habitat for waterbirds such as belted kingfisher (*Megaceryle alcyon*), spotted sandpiper (*Actitis macularius*), brown pelican (*Pelecanus occidentalis*), and mallard (*Anas platyrhynchos*) (Friends of Sausal Creek, 2016). The lack of cover, tidal influence, and narrow shoreline likely preclude waterbirds from nesting on the shoreline.

### *Special-Status and Protected Species*

The term *special-status species* refers to plant and wildlife species that are considered sufficiently rare that they require special consideration and/or protection and should be, or currently are, listed as rare, threatened, or endangered by the federal and/or state governments. Such species are legally protected under the federal and/or state Endangered Species Acts or other regulations or are species that are considered sufficiently rare by the regulatory and scientific community to qualify for protection. The term *special-status species* includes the following:

- Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA) (Code of Federal Regulations Title 50, Section 17.12 [listed plants] and Section 17.11 [listed animals] and various notices in the *Federal Register* [FR] [proposed species]);
- Species that are candidates for possible future listing as threatened or endangered under the FESA (61 FR 40, February 28, 1996);
- Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (California Code of Regulations Title 14, Section 670.5);
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code [CFGC] Section 1900 et seq.);
- Species designated by CDFW as California Species of Special Concern (SSC);[1]
- Bats identified by the Western Bat Working Group (WBWG) as medium- or high-priority species.

[1] A California SSC is one that: has been extirpated from the state; meets the state definition of threatened or endangered but has not been formally listed; is undergoing or has experienced serious population declines or range restrictions that put it at risk of becoming threatened or endangered; and/or has naturally small populations susceptible to high risk from any factor that could lead to declines that would qualify it for threatened or endangered status.

- Animals fully protected under the CFGC (Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);[2]
- Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as "rare or endangered" even if not on one of the official lists (CEQA Guidelines Section 15380);
- Raptors (birds of prey), which are specifically protected by CFGC Section 3503.5, thus prohibiting the take, possession, or killing of raptors, including owls, their nests, and their eggs;[3]
- Plants considered by CDFW and the California Native Plant Society (CNPS) to be "rare, threatened or endangered in California" (California Rare Plant Rank 1A, 1B, and 2); and
- Anadromous[4] species managed and regulated under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

The potential for the study area to support special-status plant or wildlife species was assessed based on review of the following sources:

- Historic and current aerial imagery available on Google Earth;
- Subscription-based biological resource databases including the CDFW California Natural Diversity Database (CNDDB; CDFW, 2022), CNPS Rare Plant Inventory (CNPS, 2022), and a USFWS Information for Planning and Consultation Official Species List (USFWS, 2022a) and USFWS ECOS Critical Habitat Mapper (USFWS, 2022b); and
- City of Oakland General Plan (City of Oakland, 1996)

The CNDDB and CNPS databases were queried based on a search of the Oakland East 7.5-minute U.S. Geological Survey quadrangle. The USFWS *Official List of Federal Endangered and Threatened Species that Occur in or May Be Affected by the Projects* was queried based on the Project area (refer to Appendix E, *Plant and Wildlife Species Lists for the Project Area*, for database reports). The results of these queries formed the basis for analysis of which special-status and protected species have the potential to occur in the study area (refer to **Table 4.2-1**).

## Special-Status Plants

Based on fully developed baseline conditions, no special-status plants species are expected to occur in the study area.

[2] The *fully protected* classification was California's initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. The designation can be found in the CFGC.

[3] The inclusion of birds protected by CFGC Section 3503.5 recognizes the fact that these birds are substantially less common in California than most other birds, having lost much of their habitat to development, and that the populations of these species are therefore substantially more vulnerable to further loss of habitat and to interference with nesting and breeding than most other birds. It is noted that a number of raptors are already specifically listed by federal and state wildlife authorities as threatened or endangered.

[4] Anadromous fish species originate in freshwater habitat, spend most of their lives in the sea, and return to freshwater to spawn.

**TABLE 4.2-1**
**SPECIAL-STATUS SPECIES' POTENTIAL TO OCCUR WITHIN THE STUDY AREA**

| Common Name<br>*Scientific Name* | Status | General Habitat Requirements | Potential for Species Occurrence |
|---|---|---|---|
| **Fish** | | | |
| Tidewater goby<br>*Eucyclogobius newberryi* | FE/SSC/— | Coastal lagoons, estuaries, and marshes. | **None.** Extirpated from San Francisco Bay. |
| Longfin smelt<br>*Spirinchus thaleichthys* | CT/ST,SSC/— | Found throughout the nearshore coastal waters and open waters of San Francisco Bay-Delta including the river channels and sloughs of the Delta. Spawns in the Delta. | **None.** This species is documented consistently within open water habitat of San Francisco Bay and may enter the waters adjacent to the Project area. The Project would not disturb the waterfront area. |
| **Amphibians** | | | |
| Foothill yellow-legged frog<br>*Rana boylii* | —/SE/— | Partly shaded, usually perennial, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg laying. Needs at least 15 weeks to attain metamorphosis. | **None.** No suitable habitat in study area. |
| California red-legged frog<br>*Rana draytonii* | FT/SSC/— | Streams, freshwater pools, and ponds with overhanging vegetation. Also found in woods adjacent to streams. Requires permanent or ephemeral water sources such as reservoirs and slow-moving streams and needs pools of >0.5 m depth for breeding. May aestivate in rodent burrows or cracks during dry periods. | **None.** No suitable habitat in study area. |
| **Reptiles** | | | |
| Western pond turtle<br>*Emys marmorata* | —/SSC/— | Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and suitable upland habitat for egg laying. Nest sites most often characterized as having gentle slopes (<15%) with little vegetation or sandy banks. Primarily in foothills and lowlands. | **None.** No suitable habitat in study area. |
| Alameda whipsnake<br>*Masticophis lateralis euryxanthus* | FT/ST/— | Primarily associated with scrub and chaparral habitat. Uses grassland and woodland habitats adjacent to core scrub habitat. Require open areas to maintain optimal body temperature. | **None.** No suitable habitat in study area. |
| **Birds** | | | |
| Cooper's hawk<br>*Accipiter cooperii* | —/WL/— | Nests in riparian areas and oak woodlands, and hunts songbirds at woodland edges. Increasingly found nesting in neighborhood street trees. | **Low.** Suitable nesting habitat in mature trees within study area; however, foraging opportunities low relative to other parts of the City (e.g., parks, riparian habitat, and residential neighborhoods). No CNDDB observations within 5 miles of the Project area. |
| Golden eagle<br>*Aquila chrysaetos* | BCC/FP,WL/— | Nests in cliffs, canyons and large trees in open habitats | **None.** No suitable habitat in study area. |

**TABLE 4.2-1 (CONTINUED)**
**SPECIAL-STATUS SPECIES' POTENTIAL TO OCCUR WITHIN THE STUDY AREA**

| Common Name<br>*Scientific Name* | Status | General Habitat Requirements | Potential for Species Occurrence |
|---|---|---|---|
| **Birds (cont.)** | | | |
| Yellow rail<br>*Coturnicops noveboracensis* | —/SSC/— | Nests on damp ground or up to 15 cm above ground among grasses and sedges near shallow marshes and wet meadows, where only the highest tides inundate. | **None.** No suitable habitat in study area. |
| Peregrine falcon (nesting)<br>*Falco peregrinus* | FDL/SDL,FP/— | Breeds near water at varied nest sites, including natural cliff ledges and potholes, tall metropolitan buildings and bridges, and former nests of common raven and osprey on electric transmission towers and boat navigation channel markers (towers). | **High.** A pair has nested annually since 2010 on the Fruitvale Bridge, approximately 250 feet from Project area. May also forage in study area. |
| California black rail<br>*Laterallus jamaicensis coturniculus* | —/ST,FP/— | Nests and forages in tidal emergent wetland with pickleweed. | **None.** No suitable habitat in study area. |
| Alameda song sparrow<br>*Melospiza melodia pusillula* | —/SSC/— | Inhabits brackish marshes of east San Francisco Bay, perching and nesting in dense vegetation along tidal channels. | **None.** No suitable habitat in study area. |
| California Ridgway's rail<br>*Rallus obsoletus obsoletus* | FE/SE,FP/— | Nests and forages in emergent wetlands with pickleweed, cordgrass, and bulrush. | **None.** No suitable habitat in study area. |
| **Mammals** | | | |
| Pallid bat<br>*Antrozous pallidus* | —/SSC/WBWG: High | Roosts in crevices in cliffs, buildings or bridges in areas adjacent to open space for foraging. Occurs across California; associated with lower elevations. | **Moderate.** Roosting habitat present in abandoned buildings on Project area or under Fruitvale Bridge. |
| Townsend's big-eared bat<br>*Corynorhinus townsendii* | —/SSC/WBWG: High | Throughout California in a wide variety of habitats. Commonly roosts in caverns and abandoned buildings, and large tree hollows (i.e., a couple of cubic feet). Sensitive to human disturbance. | **None.** No suitable habitat in study area. |
| Berkeley kangaroo rat<br>*Dipodomys heermanni berkeleyensis* | —/*/— | Open grassy hilltops and open spaces in chaparral and blue oak/digger pine woodlands. Needs fine, deep, well-drained soil for burrowing. | **None.** No suitable habitat in study area. |
| Silver-haired bat<br>*Lasionycteris noctivagans* | —/*/WBWG: Medium | Primarily a coastal and montane forest dweller that roosts beneath exfoliating bark, but has also been found in buildings, mines, abandoned woodpecker holes and bird nests, and rarely under rocks. Forages over or near standing water. Uncommon in San Francisco Bay Area. | **None.** No suitable habitat in study area. |
| Hoary bat<br>*Lasiurus cinereus* | —/*/WBWG: Medium | Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths; requires water. Could forage over San Francisco Bay. | **None.** No suitable habitat in study area. |

**TABLE 4.2-1 (CONTINUED)**
**SPECIAL-STATUS SPECIES' POTENTIAL TO OCCUR WITHIN THE STUDY AREA**

| Common Name<br>*Scientific Name* | Status | General Habitat Requirements | Potential for Species Occurrence |
|---|---|---|---|
| **Mammals (cont.)** | | | |
| San Francisco dusky-footed woodrat<br>*Neotoma fuscipes annectens* | —/SSC/— | Regional subspecies with range limited to San Francisco Bay Area. Inhabits forests with moderate canopy cover and brushy understory. Evergreen or live oaks and other thick-leaved trees and shrubs are important habitat components for this highly arboreal species. | **None.** No suitable habitat in study area. |
| Alameda Island mole<br>*Scapanus latimanus parvus* | —/SSC/— | Only known from Alameda Island. Found in a variety of habitats, especially annual and perennial grasslands. Prefers moist, friable soils. Avoids flooded soils. | **None.** Outside of species' known range and no suitable habitat in study area. |
| American badger<br>*Taxidea taxus* | —/SSC/— | Grasslands, savannas, deserts, timberline mountain meadows. | **None.** No suitable habitat in study area. |
| **Plants** | | | |
| Bent-flowered fiddleneck<br>*Amsinckia lunaris* | —/—/1B.2 | Cismontane woodland, valley and foothill grassland, coastal bluff scrub.<br>Blooms March – June | **None.** No suitable habitat in study area. |
| Pallid manzanita<br>*Arctostaphylos pallida* | FT/SE/1B.1 | Siliceous shale, sandy, or gravelly substrate; broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, and coastal scrub. Known from fewer than 10 occurrences in the Contra Costa Hills and Diablo Range.<br>Blooms December – March | **None.** No suitable habitat in study area. |
| Alkali milk-vetch<br>*Astragalus tener* var. *tener* | —/—/1B.2 | Grows in playas, valley and foothill grasslands in adobe clay, and vernal pools in alkaline soils.<br>Blooms March – June | **None.** No suitable habitat in study area. |
| Point Reyes salty bird's-beak<br>*Chloropyron maritimum* ssp. *palustre* | —/—/1B.2 | Coastal salt marshes and swamps.<br>Blooms June – October | **None.** No suitable habitat in study area. |
| Robust spineflower<br>*Chorizanthe robusta* var. *robusta* | FE/—/1B.1 | Dunes, openings, coastal habitats within coastal strand, foothill woodland, and northern coastal scrub habitats; 0 - 150m. Blooms April – September. | **None.** No suitable habitat in study area. |
| Presidio clarkia<br>*Clarkia franciscana* | FE/SE/1B.1 | Coastal scrub, valley and foothill grassland.<br>Blooms May – July | **None**. No suitable habitat in the study area. |
| Western leatherwood<br>*Dirca occidentalis* | —/—/1B.2 | Mesic habitats. Broadleafed upland and closed-cone coniferous forest, chaparral, cismontane woodland, North coast coniferous forest, riparian forest and woodland.<br>Blooms January – March | **None.** No suitable habitat in study area. |

**TABLE 4.2-1 (CONTINUED)**
**SPECIAL-STATUS SPECIES' POTENTIAL TO OCCUR WITHIN THE STUDY AREA**

| Common Name<br>*Scientific Name* | Status | General Habitat Requirements | Potential for Species Occurrence |
|---|---|---|---|
| **Plants (cont.)** | | | |
| Tiburon buckwheat<br>*Eriogonum luteolum* var. *caninum* | —/—/1B.2 | Chaparral, coastal prairie, valley and foothill grasslands, sandy to gravelly sites, usually on sandy to gravelly soils, strict serpentine endemic.<br>Blooms May – September | **None.** No suitable habitat in study area. |
| Jepson's coyote thistle<br>*Eryngium jepsonii* | —/—/1B.2 | Valley and foothill grassland, vernal pools. Present only in vernal pools and seasonal wetlands.<br>Blooms April – August 3 – 300m. | **None.** No suitable habitat in study area. |
| Minute pocket moss<br>*Fissidens pauperculus* | —/—/1B.2 | Coastal coniferous forest with damp coastal soils. | **None.** No suitable habitat in study area. |
| Fragrant fritillary<br>*Fritillaria liliacea* | —/—/1B.2 | Coastal prairie, valley grassland, northern coastal scrub, wetland-riparian; weak affinity for serpentine.<br>Blooms February – April | **None.** No suitable habitat in study area. |
| Dark-eyed gilia<br>*Gilia millefoliata* | —/—/1B.2 | Coastal dunes.<br>Blooms April – July | **None.** No suitable habitat in study area. |
| Diablo helianthella<br>*Helianthella castanea* | —/—/1B.2 | Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Usually rock, axonal soils; often in partial shade.<br>Blooms March – June | **None.** No suitable habitat in study area. |
| Loma Prieta hoita<br>*Hoita stroblina* | —/—/1B.1 | Mesic habitats. Usually serpentinite soils in chaparral and cismontane and riparian woodland. Affinity for serpentine soil: strong indicator.<br>Blooms May – July | **None.** No suitable habitat in study area. |
| Kellogg's horkelia<br>*Horkelia cuneata* var. *sericea* | —/—/1B.1 | Openings in closed-cone coniferous forest, maritime chaparral, coastal scrub, sandy or gravelly soil.<br>Blooms February - July | **None.** No suitable habitat in study area. |
| Oregon meconella<br>*Meconella oregana* | —/—/1B.1 | Coastal prairie and coastal scrub.<br>Blooms March – April | **None.** No suitable habitat in study area. |
| Woodland woollythreads<br>*Monolopia gracilens* | —/—/1B.2 | Mixed evergreen forest, broadleaved upland forest, redwood forest, and chaparral, and valley and foothill grasslands. Affinity to serpentine soil. 60 – 1,360m.<br>Blooms March – July | **None.** No suitable habitat in study area. |
| San Francisco popcorn flower<br>*Plagiobothrys diffusus* | —/SE/1B.1 | Coastal prairie, valley, and foothill grassland; historically on grasslands with marine influence.<br>Blooms March – June | **None**. No suitable habitat in the study area. |

**TABLE 4.2-1 (CONTINUED)**
**SPECIAL-STATUS SPECIES' POTENTIAL TO OCCUR WITHIN THE STUDY AREA**

| Common Name<br>*Scientific Name* | Status | General Habitat Requirements | Potential for Species Occurrence |
|---|---|---|---|
| **Plants (cont.)** | | | |
| Adobe sanicle<br>*Sanicula maritima* | —SR/1B.1 | Moist clay or ultramafic/serpentine soil in chaparral, coastal prairie, meadows, seeps, and valley and foothill grassland. Affinity to serpentine soils: weak indicator.<br>Blooms February – May | **None.** No suitable habitat in study area. |
| Most beautiful jewelflower<br>*Streptanthus albidus* ssp. *peramoenus* | —/—/1B.2 | Serpentine soils in chaparral, cismontane woodland, and valley and foothill grassland.<br>Blooms April - September | **None.** No suitable habitat in study area. |
| Northern slender pondweed<br>*Stuckenia filiformis* ssp. *alpina* | —/—/2B.2 | Marshes and swamps, in shallow, clear water of lakes and drainage channels. 15–2,310m.<br>Blooms May – July | **None.** No suitable habitat in study area. |
| Saline clover<br>*Trifolium hydrophilum* | —/—/1B.2 | Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. Blooms April – June | **None.** No suitable habitat in study area. |

NOTES:
CNDDB = California Natural Diversity Database; DPS = distinct population segment

KEY:
STATUS: Federal/State/Other (CNPS CRPR, Western Bat Working Group, Xerces Society for Invertebrate Conservation)

Federal (U.S. Fish and Wildlife Service)

FDL = delisted
FE = listed as endangered (in danger of extinction) by the federal government
FT = listed as threatened (likely to become endangered within the foreseeable future) by the federal government
FC = candidate to become a *proposed* species
BGEPA = Bald and Golden Eagle Protection Act
MMPA = Marine Mammal Protection Act

State (CDFW)

SE = listed as endangered by the State of California
ST = listed as threatened by the State of California
SC = state candidate for listing
* = Special Animals List
SSC = California Species of Special Concern
FP = state fully protected
SDL = delisted
SR = state rare (plants)

Other

*California Native Plant Society (CNPS) California Rare Plant Rank (CRPR)*
1A = Presumed extirpated in California; Rare or extinct in other parts of its range.
1B = Rare, threatened, or endangered throughout range; Most species in this rank are endemic to California.
2A = Extirpated in California, but common in other parts of its range.
2B = Rare, threatened, or endangered in California but common in other parts of its range.

An extension reflecting the level of threat to each species is appended to each rarity category as follows:
.1 = Seriously endangered in California
.2 = Fairly endangered in California

*Western Bat Working Group (WBWG)*
Medium = Need more information about the species, possible threats, and protective actions to implement
High = Imperiled or at high risk of imperilment

*Xerces Society for Invertebrate Conservation (XSIC)*
CI = Critically imperiled
IM = Imperiled
VU = Vulnerable
DD = Data Deficit

*International Union for Conservation of Nature (IUCN) Red List*
LC = Least concern
NT = Near threatened
VU = Vulnerable
EN = Endangered
CR = Critically endangered

SOURCE: Data compiled by Environmental Science Associates

## Special-Status Wildlife

Special-status wildlife species that have potential to occur in the study area include peregrine falcon (*Falco peregrinus*), a CDFW fully protected species known to nest on the Fruitvale Bridge, and pallid bat (*Antrozous pallidus*), a California species of special concern that roosts in abandoned buildings (**Table 4.2-1**). In addition, birds protected by the Migratory Bird Treaty Act (MBTA) and CFGC Sections 3503-3513, such as Cooper's hawk (*Accipiter cooperii*), may be present in the study area and are discussed below.

### *Nesting Birds and Raptors*

Most bird species that could occur in the Project area are protected by the MBTA and by CFGC Sections 3503–3513. Protected species that have been documented in the study area include Anna's hummingbird (*Calypte anna*), bushtit (*Psaltriparus minimus*), song sparrow (*Melospiza melodia*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), California towhee (*Melozone crissalis*).[5] The trees and shrubs in the study area provide suitable nesting and foraging habitat for these species, which are tolerant of urban activity. The MBTA and CFGC are discussed in more detail below.

## Sensitive Natural Communities

Sensitive natural communities are designated by various resource agencies such as CDFW, or in local policies and regulations. They are generally considered to have important functions or values for wildlife and/or are recognized as declining in extent or distribution and are considered threatened enough to warrant some level of protection. CDFW tracks these communities of conservation concern through its *California Sensitive Natural Community List*. Natural communities with ranks of S1 to S3 are considered sensitive natural communities, to be addressed in the environmental review processes of CEQA and its equivalents.

There are no CDFW sensitive natural communities in the study area.

## Critical Habitat Designations

USFWS can designate critical habitat for species that have been listed as threatened or endangered. *Critical habitat* is defined in FESA Section 3(5)(A) as those lands (or waters) within a listed species' current range that contain the physical or biological features that are considered essential to its conservation. The designated habitat should contain elements necessary for the primary biological needs of the species, including breeding, foraging, dispersal, migration, shelter, and growth of juveniles. The critical habitat designation serves to identify specific areas that are considered essential to the conservation of a listed species through special management or protection under FESA Section 7, which requires that federal agencies must not fund, carry out, or authorize projects that would destroy or adversely affect critical habitat.

There is no critical habitat in the study area.

[5] Birds of the Sausal Creek Watershed: A Checklist. Published by Friends of Sausal Creek, April 2016.

# 4.2.3 Regulatory Setting

## Federal

### *Endangered Species Act*

The U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service are the designated federal agencies responsible for administering the FESA. The FESA defines species as "endangered" and "threatened" and provides regulatory protection for any species thus designated. FESA Section 9 prohibits the "take" of species listed by USFWS as threatened or endangered. As defined in the FESA, *taking* means "… to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in such conduct."

FESA Section 7(a)(2) requires all federal agencies, including USFWS, to evaluate projects authorized, funded, or carried out by federal agencies with respect to any species proposed for listing or already listed as endangered or threatened and the species' critical habitat, if any is proposed or designated. Federal agencies must undertake programs for the conservation of endangered and threatened species and are prohibited from authorizing, funding, or carrying out any action that would jeopardize a listed species or destroy or modify its "critical habitat."

As defined in the FESA, "individuals, organizations, states, local governments, and other non-federal entities are affected by the designation of critical habitat only if their actions occur on federal lands, require a federal permit, license, or other authorization, or involve federal funding."

### *Migratory Bird Treaty Act*

The MBTA is the domestic law that affirms and implements a commitment by the United States to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. Unless and except as permitted by regulations, the MBTA makes it unlawful at any time, by any means, or in any manner to intentionally pursue, hunt, take, capture, or kill migratory birds in the United States. The law also applies to the intentional disturbance and removal of nests occupied by migratory birds or their eggs during the breeding season.

### *Federal Regulation of Wetlands and Other Waters*

The regulations and policies of various federal agencies (e.g., U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, and U.S. Fish and Wildlife Service) mandate that the filling of wetlands be avoided unless it can be demonstrated that there is no practicable alternative to filling. The USACE has primary federal responsibility for administering regulations that concern wetlands and other waters under the statutory authority of the Clean Water Act (section 404) and the Rivers and Harbors Act (sections 9 and 10). No federal jurisdictional waters occur in the Project area.

## State

In addition to CEQA, the primary state planning, treatment, and review mechanisms for biological resources in the study area are CESA; CFGC Sections 3503, 3503.5, and 3511; and the Clean Water Act Section 401. Each is summarized below.

### *California Endangered Species Act*

The CESA closely parallels the conditions of the FESA; however, it is administered by CDFW. CESA prohibits the "taking" of listed species except as otherwise provided in state law. Unlike the FESA, CESA applies the take prohibitions to species petitioned for listing (state candidates). State lead agencies are required to consult with CDFW to ensure that any actions are not likely to jeopardize the continued existence of any state-listed species or result in destruction or degradation of required habitat. CDFW is required to coordinate with USFWS for actions that involve both federally listed and state-listed species.

Under CFGC Section 2081, CDFW may authorize individuals or public agencies to import, export, take, or possess any endangered, threatened, or candidate species in the state of California. These acts that are otherwise prohibited may be authorized through permits or memoranda of understanding if:

1. The take is incidental to an otherwise lawful activity;
2. Impacts of the authorized take are minimized and fully mitigated;
3. The permit is consistent with any regulations adopted pursuant to any recovery plan for the species; and
4. The applicant ensures adequate funding to implement the measures required by CDFW.

CDFW makes this determination based on the best scientific and other information that is reasonably available and includes consideration of the species' capability to survive and reproduce.

### *California Fish and Game Code Sections 3503, 3503.5, and 3513*

Under these Fish and Game Code sections, a project operator is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory non-game bird; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or non-game birds; or the taking of any non-game bird under CFGC Section 3800. CFGC Section 3513 adopts the U.S. Department of the Interior's take provisions under the MBTA.

### *State Regulation of Wetlands and Other Waters*

The state's authority in regulating activities in wetlands and waters resides primarily with the State Water Resources Control Board. The state board, acting through the San Francisco Bay Regional Water Quality Control Board under Clean Water Act section 401, must certify that a Corps Clean Water Act section 404 and Rivers and Harbors Act section 10 permit action meets state water quality objectives. Any condition of water quality certification is then incorporated

into the Corps' section 404/10 permit authorized for the Project. No state jurisdictional waters occur in the Project area.

# Local

## *City of Oakland General Plan*

The *Open Space, Conservation, and Recreation (OSCAR) Element* of the City of Oakland General Plan was adopted in 1996. OSCAR policies pertaining to natural resources with potential relevance to the Project include the following (City of Oakland, 1996):

**Objective OS-12: Street Trees.** To "green" Oakland's residential neighborhoods and commercial areas with street trees.

***Policy OS-12.1: Street Tree Selection.*** Incorporate a broad and varied range of tree species which is reflected on a city-maintained list of approved trees. Street tree selection should respond to the general environmental conditions at the planting site, including climate and micro-climate, soil types, topography, existing tree planting, maintenance of adequate distance between street trees and other features, the character of existing development., and the size and context of the tree planting area.

***Policy OS-12.2: Street Tree Maintenance.*** Maintain street trees to promote their natural forms, eliminate hazardous conditions, provide adequate vertical clearance over streets and sidewalks, and abate pest and disease problems.

***Policy OS-12.3: Street Tree Removal.*** Remove street trees only if they are hazardous, severely and incurably infested with insects or blight, or are severely and irreversibly damaged and deformed. Provide replacement trees in all cases where the site is suitable for street trees.

**Objective CO-4: Water Supply.** To maintain a water supply sufficient to meet local needs while minimizing the need to develop new water supply facilities.

***Policy CO-4.2: Drought-Tolerant Landscaping.*** Require use of drought-tolerant plants to the greatest extent possible and encourage the use of irrigation systems which minimize water consumption.

***Policy CO-7.4: Tree Removal.*** Discourage the removal of large trees on already developed sites unless removal is required for biological, public safety, or public works reasons.

## *Oakland Municipal Code*

### City of Oakland Protected Tree Ordinance

The City of Oakland Protected Tree Ordinance (OMC Chapter 12.36) permits removal of protected trees under certain circumstances. To grant a tree removal permit, the City must determine that removal is necessary in order to accomplish one of the following objectives:

- To ensure public health and safety,
- To avoid an unconstitutional taking of property,
- To take reasonable advantage of views,

- To pursue acceptable professional practice of forestry or landscape design, or
- To implement the vegetation management prescriptions in the S-11 site development review zone.

Protected trees include the following:

> *Quercus agrifolia* (California or coast live oak) measuring four inches diameter at breast height (dbh) or larger, and any other tree measuring nine inches dbh or larger except *Eucalyptus* spp. and *Pinus radiata* (Monterey pine); provided, however, Monterey pine trees on City property and in development-related situations where more than five Monterey pine trees per acre are proposed to be removed are considered protected trees.

### Creek Protection, Stormwater Management, and Discharge Control Ordinance

The City's Creek Protection, Stormwater Management, and Discharge Control Ordinance (Chapter 13.16 of the Oakland Municipal Code) prohibits activities that would result in the discharge of pollutants to Oakland's waterways or in damage to creeks, creek functions, or habitat. The Ordinance requires the use of standard BMPs to prevent pollution or erosion to creeks and/or storm drains. Additionally, a creek protection permit is required for any construction work on creekside properties. The Ordinance establishes comprehensive guidelines for the regulation of discharges to the City's storm drain system and the protection of surface water quality. Under the ordinance, the City of Oakland Public Works Agency issues permits for storm drainage facilities that would be connected to existing City drainage facilities. The Ordinance includes enforcement provisions to provide more effective methods to deter and reduce the discharge of pollutants to the storm drain system, local creeks, and San Francisco Bay.

As described in Section 4.7.6, *Hydrology and Water Quality*, the Project area is bordered by an artificial tidal canal that is a part of the Oakland Estuary, which is connected to San Francisco Bay. The Estuary is considered a waterway under the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16). As described in Chapter 3, *Project Description*, the Project would include a realignment of Alameda Avenue, including new pedestrian sidewalks and bike facilities, and increased public access to the estuary shoreline and the Bay Trail. This construction work would occur within the BCDC jurisdiction, which is generally the first 100 feet inland from the shoreline of the Oakland Estuary. In addition, this work would occur as close as one foot from the top of the bank. As the Project would include exterior work within 20 feet of the top of bank of the Oakland Estuary, the Project would be required to obtain a Category IV Creek Protection Permit through submittal of a Creek Protection Plan and accompanying hydrology report[6]. The Creek Protection Plan may include, but is not limited to, implementation of litter prevention measures, dust control measures, methods of cleaning tools and equipment, construction site fencing, sediment and erosion control measures, wet weather protection, and emergency

[6] City Municipal Code 13.16.130.E, Reclassification of Category, permits the Chief of Building Services to reclassify a Creek Protection Permit application for Category IV Creek Protection Permits. If the applicant can demonstrate to the reasonable satisfaction of the Chief of Building Services that development or work shall not cause adverse impacts to the creek (including without limitation: erosion, bank failure, increased runoff, sediment loading, transfer or pollutants, or damage to the natural habitat, riparian vegetation or wildlife), then an application for Categories II, III or IV may be reclassified. There is the potential for the Project Creek Permit application to be downgraded to Category II should the applicant demonstrate that there would be no new runoff through compliance with C3 requirements.

preparations for construction-related spills. See Section 4.7.6.2 for further discussion of the Creek Protection Plan requirements.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on biological resources and applicable to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts on biological resources. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA BIO-1: Bird Collision Reduction Measures.** *(Standard Condition of Approval 28)*

**Requirement:** The project applicant shall submit a Bird Collision Reduction Plan for City review and approval to reduce potential bird collisions to the maximum feasible extent. The Plan shall include all of the following mandatory measures, as well as applicable and specific project Best Management Practice (BMP) strategies to reduce bird strike impacts to the maximum feasible extent. The project applicant shall implement the approved Plan. Mandatory measures include all of the following:

i. For large buildings subject to federal aviation safety regulations, install minimum intensity white strobe lighting with three second flash instead of solid red or rotating lights.

ii. Minimize the number of and co-locate rooftop-antennas and other rooftop structures.

iii. Monopole structures or antennas shall not include guy wires.

iv. Avoid the use of mirrors in landscape design.

v. Avoid placement of bird-friendly attractants (i.e., landscaped areas, vegetated roofs, water features) near glass unless shielded by architectural features taller than the attractant that incorporate bird friendly treatments no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule), as explained below.

vi. Apply bird-friendly glazing treatments to no less than 90 percent of all windows and glass between the ground and 60 feet above ground or to the height of existing adjacent landscape or the height of the proposed landscape. Examples of bird-friendly glazing treatments include the following:

- Use opaque glass in windowpanes instead of reflective glass.
- Uniformly cover the interior or exterior of clear glass surface with patterns (e.g., dots, stripes, decals, images, abstract patterns). Patterns can be etched, fritted, or on films and shall have a density of no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule).
- Install paned glass with fenestration patterns with vertical and horizontal mullions no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule).

- Install external screens over non-reflective glass (as close to the glass as possible) for birds to perceive windows as solid objects.
- Install UV-pattern reflective glass, laminated glass with a patterned UV-reflective coating, or UV-absorbing and UV-reflecting film on the glass since both most birds can see ultraviolet light, which is invisible to humans.
- Install decorative grilles, screens, netting, or louvers, with openings no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule).
- Install awnings, overhangs, sunshades, or light shelves directly adjacent to clear glass which is recessed on all sides.
- Install opaque window film with a pattern/design which also adheres to the "two-by-four" rule for coverage.

vii. Reduce light pollution. Examples include the following:

- Extinguish nighttime architectural illumination treatments during bird migration season (February 15 to May 15 and August 15 to November 30).
- Install time switch control devices or occupancy sensors on non-emergency interior lights that can be programmed to turn off during non-work hours and between 11:00 p.m. and sunrise.
- Reduce perimeter lighting whenever possible.
- Install full cut-off, shielded, or directional lighting to minimize light spillage, glare, or light trespass.
- Do not use beams of lights during the spring (February 15 to May 15) or fall (August 15 to November 30) migration.

viii. Develop and implement a building operation and management manual that promotes bird safety. Example measures in the manual include the following:

- Donation of discovered dead bird specimens to an authorized bird conservation organization or museums (e.g., UC Berkeley Museum of Vertebrate Zoology) to aid in species identification and to benefit scientific study, as per all federal, state and local laws.
- Distribution of educational materials on bird-safe practices for the building occupants. Contact Golden Gate Audubon Society or American Bird Conservancy for materials.
- Asking employees to turn off task lighting at their work stations and draw office blinds, shades, curtains, or other window coverings at end of work day.
- Install interior blinds, shades, or other window coverings in windows above the ground floor visible from the exterior as part of the construction contract, lease agreement, or CC&R.
- Schedule nightly maintenance during the day or to conclude before 11 p.m., if possible.

**SCA BIO-2: Tree Removal During Bird Breeding Season.** *(Standard Condition of Approval 29)*

**Requirement:** To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest.

**SCA BIO-3: Tree Permit.** *(Standard Condition of Approval 30)*

***a. Tree Permit Required.***

**Requirement:** Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit.

***b. Tree Protection During Construction.***

**Requirement:** Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist:

i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.

ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree.

iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's

consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree.

iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration.

v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed.

vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations.

***c. Tree Replacement Plantings.***

**Requirement:** Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria:

i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered.

ii. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia californica (California Bay Laurel), or other tree species acceptable to the Tree Division.

iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate.

iv. Minimum planting areas must be available on site as follows:

- For Sequoia sempervirens, three hundred fifteen (315) square feet per tree;
- For other species listed, seven hundred (700) square feet per tree.

v. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may

be substituted for required replacement plantings, with all such revenues applied toward tree planting in City parks, streets and medians.

vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense.

## 4.2.4 Environmental Impacts and Mitigation Measures

### Significance Criteria

Based on the City of Oakland thresholds of significance guidelines (City of Oakland 2020b), for the purposes of this EIR, a biological resources impact would be significant if implementing the Project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;
3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
6. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

### Approach to Analysis

The impact analysis is based on the resources, references, and data collection methods identified in the *Local and Regional Setting* discussion in Section 4.2.1, *Environmental Setting*. The analysis addresses potential direct and indirect impacts from construction or operation of the Project, defined as follows:

*Direct impacts* are those that could occur at the same time and place as project implementation, such as the removal of habitat as a result of ground disturbance.

*Indirect impacts* are those that could occur either at a later time or at a distance from the project area, but that are reasonably foreseeable, such as the loss of an aquatic species as a result of upstream effects on water quality or quantity.

Direct and indirect impacts on biological resources may vary in duration; they may be temporary, short term, or long term.

Using the significance criteria listed above, the analysis considers the potential impacts of the Project on suitable habitat, special-status species, sensitive natural communities, wetlands, and wildlife corridors, and potential Project conflicts with local policies affecting biological resources. Mitigation measures are identified, as necessary, to reduce impacts to less-than-significant levels.

## Topics Considered and No Impact Determined

The Project would have no impact to the following topic based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, this topic is not addressed further in this document for the following reasons:

- ***Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*** There are no adopted or approved local, regional, or state habitat conservation plans applicable to the Project area; therefore, the following significance threshold does not apply to the Project and is not discussed further

## Project Impact and Discussion

**Impact BIO-1: Implementation of the Project would not have a substantial adverse effect, either directly, indirectly, or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS (nesting birds and roosting bats). (*Less than Significant Impact, with SCAs and Mitigation*)**

The study area does not include suitable habitat or is outside of the known geographic or elevation range, for the majority of the terrestrial species documented in the CNDDB and CNPS searches. As a developed site, the Project area provides minimal habitat for sensitive species; however, the study area includes suitable habitat for, and is within the known range of, the following species: Cooper's hawk, peregrine falcon, and pallid bat. In addition, birds protected by the MBTA and CFGC Section 3503 have potential to occur in the study area. Therefore, the following analysis is limited to potential impacts on these wildlife species.

### Nesting Birds

#### Construction

The Project would involve infill development located in a highly urbanized area with ongoing baseline disturbance, including busy road and bridge traffic, unhoused people living in recreational vehicles along Alameda Avenue, and boating on the Oakland Estuary. Although species present in the study area are likely to have adapted to fairly high levels of disturbance in this developed portion of the City, construction within the Project area could result in direct or indirect impacts on one or two special-status birds, and nesting birds protected by the MBTA and CFGC Section 3503. The existing vacant structures on the project site provide significant nesting

opportunities due to the complexity and dilapidation of the structures and access to interiors. Birds protected by the MBTA could nest on the building roof, under eaves, on flat surfaces associated with the stacks and lattice work and inside the building if there is ingress and egress, as well as in trees and shrubs. Direct impacts on nesting birds could result from the removal of trees and vegetation and/or demolition of buildings while an active bird nest is present. In addition, earth moving, building demolition, operation of heavy equipment, and increased human presence could result in noise, vibration, and visual disturbance that could indirectly result in nest failure (disturbance, avoidance, or abandonment that leads to unsuccessful reproduction), or could cause flight behavior that would expose an adult or its young to predators. These activities could cause birds that have established a nest before the start of construction to change their behavior or even abandon an active nest, putting their eggs and nestlings at risk for mortality.

Impacts during the non-breeding season generally are not considered significant, primarily because of the birds' mobility and ability to access other comparable foraging habitat in the region. However, impacts during the breeding season would have a potentially significant impact.

The Project would involve removal of seven trees located in the Project site interior, at the intersection of Alameda Avenue and Fruitvale Avenue, and at the existing entrance at Alameda Avenue, which would be done in accordance with the conditions of SCA BIO-1, Tree Removal During Breeding Season, thereby reducing direct impacts on birds nesting in trees to be removed. In addition, potential impacts to nesting birds could occur during building demolition or construction, unrelated to the removal of trees during the avian nesting season, hence, Mitigation Measures BIO-1, Worker Environmental Awareness Program Training, and BIO-2, Avoid and Minimize Impact on Nesting Birds, are additionally required to mitigate direct and indirect impacts on birds nesting in or on buildings and undisturbed vegetation both in the Project area and within the greater study area.

Implementation of SCA BIO-2, Mitigation Measure BIO-1, and Mitigation Measure BIO-2 would reduce construction-related impacts by limiting construction to the non-nesting season when feasible or, if avoiding the nesting season is not feasible, conducting pre-construction surveys for nesting birds and establishing no-disturbance buffers around any active nests until birds have fledged and are able to leave the area; and reporting findings to the City prior to initiation of construction. Therefore, implementation of this mitigation measure would reduce potential impacts on nesting birds to less than significant.

**Mitigation Measure BIO-1, Worker Environmental Awareness Program Training**, and **Mitigation Measure BIO-2, Avoid and Minimize Impacts on Nesting Birds**, would reduce construction-related impacts to less than significant.

> **SCA BIO-2: Tree Removal During Bird Breeding Season.**
>
> **Mitigation Measure BIO-1: Worker Environmental Awareness Program Training.** Project-specific Worker Environmental Awareness Program (WEAP) training shall be developed by a qualified biologist and provided to all Project personnel prior to the start of Project demolition/construction or tree removal work. The training can be provided in

a brochure or as a video. The WEAP training shall generally include, but not be limited to, education about the following:

a) Environmental rules and regulations, and penalties for non-compliance.

b) Avoidance measures and a protocol to follow, including a communication chain, if nesting birds or roosting bats are encountered.

**Mitigation Measure BIO-2: Avoid and Minimize Impacts on Nesting Birds.** The Project Applicant shall take adequate measures to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act when in active use. This shall be accomplished by taking the following steps.

a) If vegetation removal and/or construction is proposed during the nesting season (February 15 to August 31), a pre-construction survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within 7 days prior to the onset of vegetation removal and/or construction, to identify any active nests in the Project area and in the vicinity of proposed construction. Surveys shall be performed for the Project area, vehicle and equipment staging areas, and suitable habitat within 150 feet of the Project area boundary to locate any active passerine (e.g., songbird) nests and within 250 feet of the Project area boundary to locate any active raptor (bird of prey) nests.

b) If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September 1 to February 14), construction may proceed with no restrictions.

c) If bird nests are found, the qualified biologist shall establish an adequate no-disturbance buffer zone around the nest location. Construction activities and/or vegetation removal shall be restricted within the no-disturbance buffer zone until the qualified biologist has confirmed that any young birds have fledged and are able to leave the construction area. Required setback distances for the no-disturbance buffer zone shall be established by the qualified biologist and may vary depending on species, line-of-sight between the nest and the construction activity, and the birds' sensitivity to disturbance. Buffer sizes shall initially be 200 feet for raptors and 50 feet for other birds, but may be modified, as appropriate, by the qualified biologist based on site conditions. As deemed necessary by the qualified biologist, the no-disturbance buffer zone shall be fenced with temporary orange construction fencing.

d) Any birds that begin nesting within the Project area and survey buffers amid construction activities shall be assumed to be habituated to construction-related or similar noise and disturbance levels and no work exclusion zones shall be established around active nests in these cases; however, should birds nesting nearby begin to show disturbance associated with construction activities, no-disturbance buffer zones shall be established as determined by the qualified wildlife biologist.

e) Any work that must occur within established no-disturbance buffer zones around active nests shall be monitored by a qualified biologist. If adverse effects in response to Project work within the buffer are observed and could compromise the nest's success, work within the no-disturbance buffer shall halt until the nest occupants have fledged.

f) A report of findings shall be prepared by the qualified biologist and submitted to the City for review and approval prior to initiation of construction within any no-

disturbance buffer zone during the nesting season. The report shall either confirm absence of any active nests or shall confirm that any young within a designated no-disturbance zone and construction can proceed.

### Operations

Operational activities associated with the Project post-construction are unlikely to indirectly impact nesting birds due to the baseline level of human disturbance already occurring in and adjacent to the study area and the similar levels of operational disturbance pre- and post-construction. Birds nesting in these areas are assumed to be habituated to such disturbance, and therefore, the impacts of human disturbance would be less than significant.

**Mitigation:** None required.

## Roosting Bats

### Construction

Pallid bat, a California species of special concern, may be present onsite and roosting in the existing abandoned Owens-Brockway Glass manufacturing facility. Construction activities could result in direct impacts on roosting bats if they were disturbed, killed, or injured by demolition of a structure in which they were roosting. If roosting bats are present, construction or demolition noise could result in disturbance, avoidance, or abandonment of roosts resulting in unsuccessful reproduction. If building demolition were to occur during periods of winter torpor or maternity roosting, any bats present would likely not survive the disturbance. Disturbance of special-status bat species would be a potentially significant impact. Therefore, **Mitigation Measure BIO-3**, **Avoid and Minimize Impacts on Roosting Bats**, by which a qualified biologist shall perform a pre-construction assessment of the Project area to identify any potentially active roost sites, is required to reduce this impact to less than significant.

**Mitigation Measure BIO-3: Avoid and Minimize Impacts on Roosting Bats.** A qualified biologist who is experienced with bat surveying techniques (including auditory sampling methods), behavior, roosting habitat, and identification of local bat species shall be consulted prior to demolition or building relocation activities to conduct a pre-construction habitat assessment of the Project area (focusing on buildings to be demolished or relocated) to characterize potential bat habitat and identify potentially active roost sites. No further action is required should the pre-construction habitat assessment not identify potential bat roosting habitat or signs of potentially active bat roosts within the Project area (e.g., guano, urine staining, dead bats, etc.).

The following measures shall be implemented should potential bat roosting habitat or potentially active bat roosts be identified during the habitat assessment in buildings to be demolished within the study area:

a) In areas identified as potential roosting habitat during the habitat assessment, initial building demolition shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15, to the extent feasible. These periods avoid the bat maternity roosting season and period of winter torpor.[7]

[7] Torpor refers to a state of decreased physiological activity with reduced body temperature and metabolic rate.

b) Buildings with potential bat roosting habitat or active (outside of maternity and winter torpor seasons) roosts shall be disturbed only under clear weather conditions when precipitation is not forecast for three days and when daytime temperatures are at least 50 degrees Fahrenheit.

c) The demolition or relocation of buildings containing or suspected of containing potential bat roosting habitat or active bat roosts shall be done under the supervision of the qualified biologist. When appropriate, buildings shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost, likely in the evening and after bats have emerged from the roost to forage. Under no circumstances shall active maternity roosts be disturbed until the roost disbands at the completion of the maternity roosting season or otherwise becomes inactive, as determined by the qualified biologist.

d) If avoidance of the bat maternity roosting season and period of winter torpor, defined under a), above, is infeasible, the qualified biologist shall conduct pre-construction surveys of potential bat roost sites identified during the initial habitat assessment no more than 14 days prior to building demolition.

e) If active bat roosts or evidence of roosting is identified during pre-construction surveys for building demolition, the qualified biologist shall determine, if possible, the type of roost and species. A no-disturbance buffer shall be established around roost sites until the start of the seasonal windows identified above, or until the qualified biologist determines roost sites are no longer active. The size of the no-disturbance buffer would be determined by the qualified biologist and would depend on the species present, roost type, existing screening around the roost site (such as dense vegetation or a building), as well as the type of construction activity that would occur around the roost site.

---

**Impact BIO-2: Implementation of the Project would not have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS. (*No Impact*)**

The study area is not within critical habitat for any federally threatened or endangered species (USFWS, 2022b). The study area also is not within or in the immediate vicinity of any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS. Sausal Creek enters the Oakland Estuary via a culvert under Alameda Avenue approximately 30 feet from the Project area. The nearest daylighted section of Sausal Creek is approximately 0.75 miles upstream from the culvert (USFWS, 2022c). There is no undeveloped habitat within the study area that could support a sensitive natural community. Therefore, the Project would have no impact on riparian habitat or sensitive natural communities.

**Mitigation:** None required.

---

**Impact BIO-3: Implementation of the Project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. (*Less than Significant with SCAs*)**

The Project area is in a relatively flat, densely developed, urban area. No state-or federally jurisdictional wetlands occur in the Project area; hence, no impacts would occur to such features.

The Oakland Estuary, located between the cities of Oakland and Alameda and hydrologically connected to the San Francisco Estuary, is approximately 20 feet southwest of Alameda Avenue. The Oakland Estuary and the San Francisco Estuary are waters of the U.S. As discussed in detail in Section 4.7.6, *Hydrology and Water Quality*, the Project would control stormwater on-site and would not include any non-stormwater discharges to the storm drain system. Implementation of SCA HYD-1, State Construction General Permit, SCA HYD-2, NPDES C.3 Stormwater Requirements for Regulated Projects, and SCA UTIL-5, Storm Drain System, would ensure that stormwater that could affect receiving waters is managed during Project construction and operation.

The Oakland Estuary is also considered a waterway under the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16). Because Project construction for the realignment of Alameda Avenue would occur within 20 feet of the top of bank of the Oakland Estuary, the Project Applicant would be required to prepare a Category IV Creek Protection Permit through submittal of a Creek Protection Plan and accompanying hydrology report in accordance with SCA HYD-4, Creek Protection Plan. The Creek Protection Plan may include, but is not limited to, implementation of litter prevention measures, dust control measures, methods of cleaning tools and equipment, construction site fencing, sediment and erosion control measures, wet weather protection, and emergency preparations for construction-related spills. See Section 4.7.6.2 for further discussion of the Creek Protection Plan requirements. The Project would also be subject to SCA HYD-3, Vegetation Management of Creekside Properties, requiring vegetation management prior to, during, and after the construction, further protecting against sedimentation and erosion. With implementation of SCA HYD-1, SCA HYD-2, SCA HYD 3, SCA HYD-4, and SCA UTIL-5, the Project impact on state or federally protected wetlands and waters would be less than significant with no mitigation required.

**SCA HYD-1: State Construction General Permit.** See Section 4.7.6.2.

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 4.7.6.2.

**SCA HYD-3: Vegetation Management on Creekside Properties.** See Section 4.7.6.2.

**SCA HYD-4: Creek Protection Plan.** See Section 4.7.6.2.

**SCA UTIL-5: Storm Drain System.** See Section 4.7.13.2.

**Mitigation:** None required.

**Impact BIO-4: Implementation of the Project would not interfere substantially with the movement of a 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)***

### Native Wildlife Nursery Sites

No native wildlife nursery sites occur in the Project area. Such sites, if present in the study area, would primarily include sites suitable for communally nesting or roosting birds or individual nesting birds. Potential construction- and operations-related impacts and mitigation measures on individual nesting birds are discussed above under Impact BIO-1. No suitable habitat exists in the study area for communally nesting or roosting birds such as herons and egrets, and such wildlife nursery sites (referred to as rookeries) are not expected. Aside from individual bird nests described in Impact BIO-1, the Project would have no impact on native wildlife nursery sites.

### Native Wildlife Movement Corridors

The study area is located within the Pacific Flyway along the northwestern shoreline of San Francisco Bay. Although specific migratory corridors near the study area are unknown, it can be assumed that numerous birds pass overhead or in the Project vicinity during spring and fall migrations. In addition, resident birds make daily localized flights at low elevations while they forage, disperse, and flee from dangers. Although the Project area would not be expected to host a high density of birds, the Oakland Estuary is an attractant for migrating waterfowl looking for a place to feed and rest.

#### Construction

Construction of the Project would require heavy equipment for demolition of the existing building and construction of new buildings, and may include excavators, cranes, pile drivers, dump trucks, concrete mixers, concrete pump trucks, and other industrial machinery that generate increased noise and vibration. Construction would occur during daytime periods over 17 months, during which time birds would likely avoid the Project area and perhaps adjacent portion of the Oakland Estuary within the study area; however, migratory birds could easily find undisturbed portions of the Oakland Estuary outside of the study area. In conclusion, there would be a less than significant impact on resident and migratory bird movements due to Project construction with no mitigation required.

#### Operation

The portion of buildings most likely to sustain bird strikes extends from ground level to 60 feet above the ground surface (San Francisco Planning Department, 2011). Many bird collisions are also induced by artificial night lighting, particularly from large buildings, which can be especially problematic for migrating songbirds because many are nocturnal migrants. Light fields caused by uplighting can disorient or entrap birds who become reluctant to fly from the lit area to darkness (Ogden, 1996). Research suggests that fatal bird collisions also increase as light emissions increase (Verheijen, 1981).

Direct effects on migratory and resident birds moving through an area could include death or injury if birds collide with lighted structures or with transparent or reflective glass surfaces. Glass corners,

which birds may view as an open flyway to habitat on the other side, and glass facades that reflect adjacent landscape vegetation can result in bird collisions. Indirect effects on migratory birds that become disoriented or entrapped by nighttime lighting resulting in delayed arrival at breeding or wintering grounds, and reduced energy stores necessary for migration, winter survival, or subsequent reproduction (Gauthreaux, 2006).

The proposed removal and replacement of the existing manufacturing plant and build-out of a new industrial building is not expected to substantially increase the height or nighttime uplighting on the Project area relative to existing conditions nor is it expected to increase the surface area of glass. Glazing is planned for most of the north, east, and west elevations. Two-story glazing is planned for the proposed office spaces at the corners of the building and in the middle of the north elevation. The south elevation, the elevation facing the tidal canal, would not include glazing other than a small amount at the southeast corner where proposed office is planned.

The City's SCA BIO-1, Bird Collision Reduction Measures, applies to all projects which include glass as part of the building's exterior and are located immediately adjacent to a substantial water body (e.g., Oakland Estuary). While there are no intervening tall structures between the proposed building and the Oakland Estuary, the small portion of proposed south-facing glazing would be at the southeast corner which is more than 500 feet from the Tidal Canal. Truck circulation, passenger vehicle parking, Alameda Avenue, and the parcel reserved for possible future development as retail use or a restaurant would occupy the space between the proposed building and the estuary. However, in the absence of specific design details of the possible future retail space, the Project is considered to be immediately adjacent to the Oakland Estuary Tidal Canal. As such, SCA BIO-1, Bird Collision Reduction Measures, requiring the Project Applicant to prepare and submit a Bird Collision Reduction Plan for City review and approval, would apply to the southeastern portion of the building with south-facing glazing. SCA BIO-1 would also apply to any south-facing glazing proposed for the possible future retail/restaurant space. The Bird Collision Reduction Plan shall include mandatory measures and best management practice strategies to reduce bird strike impacts. With implementation of the City's SCAs, the Project impacts related to sensitive or special status species would be less than significant with no mitigation required.

**SCA BIO-1: Bird Collision Reduction Measures.**

**Mitigation:** None required.

---

**Impact BIO-5: Implementation of the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. *(Less than Significant with SCAs*).**

The Project would involve removal of seven trees located in the Project site interior, at the intersection of Alameda Avenue and Fruitvale Avenue, and at the existing entrance at Alameda Avenue, which would be subject to SCA BIO-3, Tree Permit. Implementation of this SCA would ensure that tree removal and tree replacement plantings would be conducted in accordance with the requirements of the City's Protected Tree Ordinance. Therefore, with implementation of the

City's SCAs, the Project would not conflict with the City's Tree Protection Ordinance, and the impact would be less than significant with no mitigation required.

**SCA BIO-3: Tree Permit.**

**Mitigation:** None required.

---

## 4.2.5 Cumulative

This section presents an analysis of the cumulative effects of the Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. Significant cumulative impacts related to biological resources could occur if the incremental impacts of the Project combined with the incremental impacts of one or more of the cumulative projects identified in Section 4.0.7, *Cumulative Impacts*.

As previously discussed, the Project would have no impact on an adopted habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The Project will have no impact on a riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS and no impacts on jurisdictional wetlands and waters. Accordingly, the Project could not contribute to cumulative impacts related to these topics and they are not discussed further.

**Impact BIO-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts on biological resources. (*Less than Significant with SCAs and Mitigation Measures*)**

Significant cumulative impacts related to biological resources could occur if the incremental impacts of the Project combined with the incremental impacts of one or more of the cumulative projects would cause the Project to have a cumulatively considerable impact on special-status species, wetlands, or other waters of the United States, or on other biological resources protected by federal, state, or local regulations or policies (based on the significance criteria and thresholds presented earlier). This analysis then considers whether the incremental contribution of the Project's implementation to this cumulative impact would be considerable. Both conditions must apply for a project's cumulative effects to be significant.

The geographic scope of potential cumulative impacts on biological resources encompasses the Project and biologically linked areas that share the Sausal watershed and greater San Francisco Bay. Historic development in the region has already caused substantial adverse cumulative changes to biological resources in the study area. This includes the engineering of many portions of the Sausal Creek watershed to allow urban development and the historic loss of the riparian corridors and floodplains to urban encroachment.

The potential impacts of the Project on biological resources are largely site-specific, and the overall cumulative effects would be dependent on the degree to which significant vegetation and wildlife resources are present on a particular development site and, if present, the degree to which

they are avoided, or potential impacts are addressed through various forms of mitigation. As discussed above, the Project would result in less-than-significant impacts on biological resources including special-status species. In addition, all other cumulative development has been, or will be, subject to the same City SCAs related to biology, hydrology, and water quality and would be required to comply with the same provisions of the City's Protected Tree Ordinance and Creek Protection Ordinance. Based on compliance with these requirements and Mitigation Measures BIO-1 and BIO-2, the incremental impacts of the Project, combined with impacts of other projects in the area, would not combine to cause a significant cumulative impact on biological resources to which the Project could considerably contribute. The impact would be less than significant.

**SCA BIO-1: Bird Collision Reduction Measures.**

**SCA BIO-2: Tree Removal During Birding Season.**

**SCA BIO-3: Tree Permit.**

**SCA HYD-1: State Construction General Permit.** See Section 4.7.6.2.

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 4.7.6.2.

**SCA HYD-3: Vegetation Management on Creekside Properties.** See Section 4.7.6.2.

**SCY HYD-4: Creek Protection Permit.** See Section 4.7.6.2.

**SCA UTIL-5: Storm Drain System.** See Section 4.7.13.2.

**Mitigation Measure BIO-1: Worker Environmental Awareness Program Training.** See Impact BIO-1.

**Mitigation Measure BIO-2: Minimize Impacts to Nesting Birds.** See Impact BIO-1.

**Mitigation Measure BIO-3: Avoid and Minimize Impact on Roosting Bats.** See Impact BIO-1.

---

## 4.2.6 References

California Department of Fish and Wildlife (CDFW). 2022. *California Natural Diversity Database.* Accessed May 2022. https://wildlife.ca.gov/Data/CNDDB.

California Native Plant Society (CNPS). 2022. Online Inventory of Rare, Threatened, and Endangered Plants of California for U.S. Geological Survey 7.5-minute topographic quadrangle for San José West. Accessed June 2022. http://www.rareplants.cnps.org/.

City of Oakland. 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan.* Adopted June 11, 1996. Accessed February 10, 2022. https://cao-94612.s3.amazonaws.com/documents/oak035254.pdf.

City of Oakland. 2020b. *City of Oakland CEQA Thresholds of Significance Guidelines*, December 16, 2020.

Friends of Sausal Creek. 2016. *Birds of the Sausal Creek Watershed: A Checklist*. Published by Friends of Sausal Creek. April 2016.

Gauthreaux, S. A., and C. G. Belser. 2006. Effects of Artificial Night Lighting on Migrating Birds, in *Ecological Consequences of Night Lighting*, eds. C. Rich and T. Longcore. Covelo, CA: Island Press.

San Francisco Planning Department. 2011. *Standards for Bird-Safe Buildings*. Adopted July 14, 2011.

Ogden, Lesley J. 1996. *Collision Course: The Hazards of Lighted Structures and Windows to Migrating Birds. A Special Report for the World Wildlife Fund Canada and the Fatal Light Awareness Program*. September 1996. Accessed June 2022. https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1002&context=flap.

U.S. Fish and Wildlife Service (USFWS). 2022a. *Official List of Federal Endangered and Threatened Species that Occur in or May Be Affected by the Project.*

USFWS. 2022b. ECOS Environmental Conservation Online System Critical Habitat Mapper. Accessed June 2022. https://ecos.fws.gov/ecp/report/table/critical-habitat.html.

USFWS. 2022c. Wetlands Mapper. Accessed June 2022. https://www.fws.gov/wetlands/data/mapper.html.

U.S. Geological Survey (USGS). 2017. Western Ecological Research Center (WERC). Bioregions of the Pacific U.S. Accessed June 2022. https://www.usgs.gov/centers/werc/science/bioregions-pacific-us.

Verheijen, F.J. 1981. Bird Kills at Lighted Man-Made Structures: Not on Nights Close to a Full Moon. *American Birds* 35(3):251–254, 1981.

This page intentionally left blank

# 4.3 Greenhouse Gas Emissions

## 4.3.1 Introduction

This section assesses the potential for the Project to result in significant adverse environmental impacts from greenhouse gas (GHG) emissions. The section first includes a description of the existing environmental setting as it relates to GHG emissions and provides a regulatory framework that discusses applicable state and local regulations. This analysis considers the GHG emissions that would result from construction and operation activities associated with the Project and compares these emissions to the thresholds of significance.

## 4.3.2 Environmental Setting

### Greenhouse Gases and Climate Change

Gases that trap heat in the atmosphere are called GHGs. GHGs allow sunlight to enter the atmosphere, but trap a portion of the outward-bound infrared radiation, which warms the air. The process is similar to the effect greenhouses have in raising the internal temperature, hence the name GHGs. Both natural processes and human activities emit GHGs. The natural accumulation of GHGs in the atmosphere regulates the Earth's temperature; however, emissions from human activities such as fossil fuel-based electricity production, the use of internal combustion engines and motor vehicles have elevated the concentration of GHGs in the atmosphere. This anthropogenic accumulation of GHGs has contributed to an increase in the temperature of the Earth's atmosphere and has contributed to global climate change.

Global climate change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is a disagreement as to the rate of global climate change, multiple studies published in peer-reviewed scientific journals show that 97 percent or more of actively publishing scientists agree: climate-warming trends over the past century are very likely due to human activities (NASA, 2015). The principal GHGs are carbon dioxide ($CO_2$), methane (CH4), nitrous oxide ($N_2O$), sulfur hexafluoride ($SF_6$), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and nitrogen trifluoride ($NF_3$). $CO_2$ is the reference gas for estimating GHG emissions.

To account for the global warming potential of different GHGs, emissions are often quantified and reported as $CO_2$ equivalents ($CO_2e$). For example, $SF_6$ is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. $SF_6$, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG with 22,800 times the global warming potential as $CO_2$.[1] Large emission sources are reported in million metric tons (MMT) of $CO_2e$ (MMT $CO_2e$).[2]

[1] The California Emissions Estimator Model (CalEEMod) is the modeling software used chiefly for determining GHG emissions from CEQA projects. CalEEMod currently utilizes the global warming potentials from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4).

[2] The term metric ton is commonly used in the U.S. to refer to the metric system unit, tonne, which is defined as a mass equal to 1,000 kilograms. A metric ton is approximately 1.1 short tons and approximately 2,204.6 pounds.

Global warming potential ratios are provided by the Intergovernmental Panel on Climate Change (IPCC). Historically, GHG emission inventories were calculated using ratios from the IPCC's Second Assessment Report (SAR), published in 1996. The IPCC has since updated the ratios based on the latest science in its Fourth Assessment Report (AR4) and Fifth Assessment Report (AR5), published in 2007 (IPCC, 2007) and 2014, respectively (IPCC, 2014). The California Air Resources Board (CARB) uses ratios in AR4 for the statewide GHG emissions inventory (CARB, 2021), in the 2022 Scoping Plan for Achieving Carbon Neutrality (CARB, 2022), and in the current version of the California Emissions Estimator Model (CalEEMod) that is used to calculate $CO_2e$ values for construction as well as operations for existing and Project build-out conditions.[3]

## Effects of Climate Change

Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties in, for example, predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation.

The California Office of Planning and Research (OPR), California Natural Resources Agency (CNRA), and the State of California Energy Commission collaborated to prepare California's Fourth Climate Change Assessment (Fourth Assessment). Published in 2018, the Fourth Assessment finds that the potential impacts in California due to global climate change include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more extreme forest fires; more severe droughts punctuated by extreme precipitation events; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation (OPR et al., 2018).

The Fourth Assessment's findings are consistent with climate change studies published by the CNRA since 2009, starting with the *California Climate Adaptation Strategy* as a response to the Governor's Executive Order S-13-2008. In 2014, the CNRA rebranded the first update of the 2009 adaptation strategy as the *Safeguarding California Plan* (CNRA, 2009; CNRA, 2014). The 2018 update to the *Safeguarding California Plan* identifies hundreds of ongoing actions and next steps state agencies are taking to safeguard Californians from climate impacts within a framework of 81 policy principles and recommendations (California Natural Resources Agency, 2018). In 2016, the CNRA released *Safeguarding California: Implementation Action Plans* in accordance with Executive Order B-30-15, identifying an agency to lead adaptation efforts in each sector (California Natural Resources Agency, 2016). In accordance with the 2009 *California Climate Adaptation Strategy*, the California Energy Commission (CEC) was directed to develop a website on climate change scenarios and impacts that would be beneficial for local decision makers. The website, known as Cal-Adapt, became operational in 2011.[4] The information provided on the

[3] Version 2020.4.0.

[4] The Cal-Adapt website address is: http://cal-adapt.org.

Cal-Adapt website represents a projection of potential future climate scenarios comprised of local average values for temperature, sea-level rise, snowpack and other data representative of a variety of models and scenarios, including potential social and economic factors. Below is a summary of some of the potential effects that could be experienced in California as a result of global warming and climate change.

### *Temperature Increase*

The primary effect of adding GHGs to the atmosphere has been a rise in the average global temperature. The impact of human activities on global temperature is readily apparent in the observational record. Since 1895, the contiguous U.S. has observed an average temperature increase of 1.5 degrees Fahrenheit (ºF) per century. The last five-year period (2014–2018) is the warmest on record for the contiguous U.S. (NOAA, 2019), while the 20 warmest years have occurred over the past 22-year period (Climate Central, 2019).

The Fourth Assessment indicates that average temperatures in California could rise 5.6°F to 8.8°F by the end of the century, depending on the global trajectory of GHG emissions (OPR et al., 2018). According to the Cal-Adapt website, the portion of the City of Oakland in which the Project site is located could result in an average increase in temperature of approximately 6 to 9 percent (about 4.0 to 6.7°F) by 2070–2090, compared to the baseline 1961–1990 period.

With climate change, extreme heat conditions and heat waves are predicted to impact larger areas, last longer, and have higher temperatures. Heat waves, defined as three or more days with temperatures above 90°F, are projected to occur more frequently by the end of the century. Heat related illness includes a spectrum of illnesses ranging from heat cramps to severe heat exhaustion and life-threatening heat stroke (CalEPA, 2013).

### *Wildfires*

The hotter and dryer conditions expected with climate change will make forests more susceptible to extreme wildfires. A recent study found that, if GHG emissions continue to rise, the frequency of extreme wildfires burning over approximately 25,000 acres would increase by nearly 50 percent, and the average area burned statewide each year would increase by 77 percent, by the year 2100. In the areas that have the highest fire risk, the cost of wildfire insurance is anticipated to rise by 18 percent by 2055 and the fraction of property insured would decrease (Westerling, 2018).

### *Air Quality*

Higher temperatures, conducive to air pollution formation, would worsen air quality in California and make it more difficult for the state to achieve both national and state ambient air quality standards. Climate change may increase the concentration of ground-level ozone in particular, which can cause breathing problems, can aggravate lung diseases such as asthma, emphysema, and chronic bronchitis, and cause chronic obstructive pulmonary disease. Emissions from wildfires can lead to excessive levels of particulate matter, ozone, and volatile organic compounds. The resulting increase in fine particulate matter from wildfires is a direct threat to human health even during relatively short exposures, particularly for children, the elderly, and

people with existing respiratory problems (Kenward et a, 2013). Additionally, severe heath accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (CalEPA, 2013).

### *Water Supply and Water Quality*

There is a high degree of uncertainty with respect to the overall impact of global climate change on future water supplies in California. Studies indicate considerable variability in predicting precise impacts of climate change on California hydrology and water resources. Increasing uncertainty in the timing and intensity of precipitation will challenge the operational flexibility of California's water management systems. Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff could occur at a time when some basins are either being recharged at their maximum capacity or are already full. Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge (CNRA, 2014).

Climate change could alter water quality in a variety of ways, including through higher winter flows that reduce pollutant concentrations (through dilution) or increase erosion of land surfaces and stream channels, leading to higher sediment, chemical, and nutrient loads in rivers. Water temperature increases and decreased water flows can result in increasing concentrations of pollutants and salinity. Increases in water temperature alone can lead to adverse changes in water quality, even in the absence of changes in precipitation.

### *Hydrology and Sea Level Rise*

Climate changes could potentially affect: the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion (CNRA, 2014).

Rising sea level is one of the major areas of concern related to global climate change. Two of the primary causes for a sea level rise are the thermal expansion of ocean waters (water expanding as it heats up) and the addition of water to ocean basins by the melting of land-based ice (i.e., glaciers and polar ice caps). In 2013, the state issued guidance on sea level rise based on the scientific findings from the National Academy of Science National Research Council that indicated sea levels could rise 11 inches by 2050; 36 inches by 2100; and 55 inches by the end of the century as global climate change continues (CO-CAT, 2013). Subsequent to the 2013 guidance, the state's latest guidance adopts a probabilistic approach and includes estimates of the likely range of global sea level rise under different global emission scenarios, where the "likely range" covers the central 66 percent of the probability distribution (i.e., the sea levels that fall within the range created by the value that is 17 percent likely to occur and the value that is 83 percent likely to occur). Sea level rise of this magnitude would increasingly threaten California's coastal regions with more intense coastal storms, accelerated coastal erosion, threats to vital levees, and disruption of inland water systems, wetlands, and natural habitats. Residents may also be affected if wastewater treatment is compromised by inundation from rising sea levels, given that a number of treatment plants discharge to the Bay.

### *Agriculture*

California has a massive agricultural industry that represents 11.3 percent of total U.S. agricultural revenue. Higher $CO_2$ levels can stimulate plant production and increase plant water use efficiency. However, a changing climate presents significant risks to agriculture due to "potential changes to water quality and availability; changing precipitations patterns; extreme weather events including drought, severe storms, and floods; heat stress; decreased chill hours; shifts in pollinator lifecycles; increased risks from weeds, pest and disease; and disruptions to the transportation and energy infrastructure supporting agricultural production" (CNRA, 2014).

### *Ecosystems and Wildlife*

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. With climate change, ecosystems and wildlife will be challenged by the spread of invasive species, barriers to species migration or movement in response to changing climatic conditions, direct impacts to species health, and mismatches in timing between seasonal life-cycle events such as species migration and food availability (CNRA, 2014).

### *Public Health*

Global climate change is also anticipated to result in more extreme heat events (OPR et al., 2018). These extreme heat events increase the risk of death from dehydration, heart attack, stroke, and respiratory distress, especially with people who are ill, children, the elderly, and the poor, who may lack access to air conditioning and medical assistance. A warming planet is expected to bring more severe weather events, worsening wildfires and droughts, a decline in air quality, rising sea levels, increases in allergens and in vector-borne diseases, all of which present significant health and wellbeing risks for California populations (CNRA, 2018).

While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great. All of these impacts will have either direct or indirect negative effects for the businesses of the Project and the City.

## Emissions Inventories

### *Global Emissions*

Global estimates are based on country inventories developed as part of programs of the United Nations Framework Convention on Climate Change. Worldwide emissions of GHGs in 1970 were 27 billion metric tons of $CO_2e$ per year. Worldwide man-made emissions of GHGs in 2010 were approximately 49 billion metric tons $CO_2e$, including ongoing emissions from industrial and agricultural sources and emissions from land use changes (e.g., deforestation). Emissions of $CO_2$ from fossil fuel use and industrial processes account for 65 percent of the total while $CO_2$ emissions from all sources accounts for 76 percent of the total. Methane emissions account for 16 percent and $N_2O$ emissions for 6.2 percent (IPCC, 2014).

### *U.S. Emissions*

In 2020, the United States emitted about 5,222 MMT $CO_2e$. Of the major sectors nationwide, transportation accounts for the highest amount of GHG emissions (approximately 27 percent), followed by electricity (25 percent), industry (24 percent), agriculture (11 percent), and commercial and residential buildings (13 percent) (U.S. EPA, 2022).

### *State of California Emissions*

California produced approximately 369 million metric tons of $CO_2e$ in 2020. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2020, accounting for approximately 38 percent of total GHG emissions in the state. This sector was followed by the industrial sector (23 percent), and the electric power sector (16 percent) (CARB, 2022a).

### *Alameda County GHG Emissions*

Emission inventories developed for Alameda County reveal that activities in the unincorporated County regions and within the County's 14 municipalities generated approximately 13.7 million gross metric tons of $CO_2e$ emissions in 2005 (Alameda County, 2009). The transportation sector is the greatest contributor generating approximately 57 percent of these emissions while commercial/industrial sector accounts for 18 percent. The residential, direct access fuel/power purchases, and waste sectors make up 14 percent, 7 percent and 4 percent, respectively.

### *City of Oakland GHG Emissions*

The City of Oakland published their 2017 Greenhouse Gas Emissions Inventory Report (Inventory Report) in June 2020. According to the Inventory Report, in 2017, local emissions generated within the City's limits equaled 2,643,884 MT $CO_2e$. In Oakland, the largest source of GHG emissions is the transportation sector (66 percent), followed by the buildings and energy sector (25.8 percent which includes electricity and natural gas use in homes, businesses, and other buildings. In addition, the material consumption and waste sector generated 4.8 percent of the City's emissions, the Port of Oakland generated 2.4 percent of city emissions, and Local Government Operations generated the final 1 percent of emissions (City of Oakland, 2020c).[5]

## 4.3.3 Regulatory Setting

## Federal

### *U.S. Environmental Protection Agency "Endangerment" and "Cause or Contribute" Findings*

The U.S. Supreme Court held that the United States Environmental Protection Agency (U.S. EPA) must consider regulation of motor vehicle GHG emissions. In *Massachusetts v. Environmental Protection Agency* et al., twelve states and cities, including California, together with several

[5] The City of Oakland published their 2019 Greenhouse Gas Emissions Inventory in September 2022, after the NOP for this Draft EIR was published in April 2022.

environmental organizations sued to require the U.S. EPA to regulate GHGs as pollutants under the CAA (127 S. Ct. 1438 (2007)). The Supreme Court ruled that GHGs fit within the CAA's definition of a pollutant and the U.S. EPA had the authority to regulate GHGs.

On December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- **Endangerment Finding:** The current and projected concentrations of the six key GHGs—$CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, and $SF_6$—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

These findings did not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

### Vehicle Emissions Standards

In 1975, Congress enacted the 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 EPA and National Highway Traffic Safety Administration (NHTSA) are responsible for establishing additional vehicle standards. In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve both 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of $CO_2$ per mile. According to the U.S. EPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle (U.S. EPA, 2012). Notably, the State of California harmonized its vehicle efficiency standards through 2025 with the federal standards (see Advanced Clean Car program below).

In January 2017, US EPA issued it Mid-Term Evaluation of the GHG emissions standards, finding that it would be practical and feasible for automakers to meet the model year 2022-2025 standards through a number of existing technologies.

In August 2018, the US EPA revised its 2017 determination, and issued a proposed rule that maintains the 2020 Corporate Average Fuel Economy (CAFE) and $CO_2$ standards for model years 2021 through 2026.[6] The estimated CAFE and $CO_2$ standards for model year 2020 are 43.7 mpg and 204 grams of $CO_2$ per mile for passenger cars and 31.3 mpg and 284 grams of $CO_2$ per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. In September 2019, EPA finalized the Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program and announced its decision to withdraw the Clean Air Act preemption waiver granted to the State of California in 2013. In March 2022, the US EPA reinstated California's waiver restoring the state's authority to set and enforce more

[6] Federal Register. Vol. 83, No. 165. August 24, 2018. Proposed Rules.

stringent standards than the federal government, including California's GHG emission standards and zero emission vehicle mandate.[7]

## State

### *California Global Warming Solutions Act (Assembly Bill 32)*

The California Global Warming Solutions Act (Assembly Bill [AB] 32, 2006), as amended, sets statewide greenhouse gas (GHG) emissions caps. The California Air Resources Board (CARB) established the Climate Change Scoping Plan, which outlined a framework for achieving the emission reduction goals set in the California Global Warming Solutions Act. In 2016, SB 32 and its companion bill AB 197 established a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and included provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

### *Assembly Bill 1279 and the 2022 Scoping Plan*

The California State Legislature enacted AB 1279, *The California Climate Crisis Act*, on September 16, 2022. AB 1279 establishes the policy of the State of California to achieve net zero GHG emissions as soon as possible but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. Additionally, AB 1279 mandates that by 2045, statewide anthropogenic GHG emissions are to be reduced at least 85 percent below 1990 levels. The *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), adopted by CARB in December 2022, expands on prior scoping plans. This plan responds to more recent legislation, outlining a technologically feasible, cost-effective, and equity-focused path to achieve the State's climate target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045 and achieving carbon neutrality by 2045 or earlier (CARB 2022b).[8] The 2022 Scoping Plan outlines the strategies the State will implement to achieve carbon neutrality by reducing GHG emissions to meet the anthropogenic target, and by expanding actions to capture and store carbon through the State's natural and working lands and using a variety of mechanical approaches.

### *Senate Bill 375*

Signed into law on October 1, 2008, SB 375 supplements GHG reductions from new vehicle technology and fuel standards with reductions from more efficient land use patterns and improved transportation. Under the law, the CARB approved GHG reduction targets in February 2011 for California's 18 federally designated regional planning bodies, known as Metropolitan Planning Organizations (MPOs). The CARB may update the targets every four years and must update them

[7] California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a Previous Withdrawal of a Waiver of Preemption; Notice of Decision, 87 Fed. Reg. 14,332 (Mar. 14, 2022), https://www.federalregister.gov/documents/2022/03/14/2022-05227/california-state-motor-vehicle-pollution-control-standards-advanced-clean-car-program.

[8] *Carbon neutrality* means "net zero" emissions of GHGs. In other words, it means that GHG emissions generated by sources such as transportation, power plants, and industrial processes must be less than or equal to the amount of $CO_2$ that is stored, both in natural sinks and through mechanical sequestration. AB 1279 uses the terminology "net zero" and the 2022 Scoping Plan uses the terminology "carbon neutrality" or "carbon neutral." For purposes of the Draft 2045 CAP and this EIR, these terms mean the same thing and are used interchangeably.

every eight years. MPOs in turn must demonstrate how their plans, policies and transportation investments meet the targets set by the CARB through the Sustainable Communities Strategy.

### *California Building and Energy Efficiency Standards (Title 24)*

The CEC first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The current Title 24, Part 6 standards (2019 standards) were made effective on January 1, 2020.

### *California Green Buildings Standards Code (CALGreen)*

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. CALGreen is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment. Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and nonresidential uses; the new measures took effect on January 1, 2020.

## Regional

### *Bay Area Air Quality Management District Clean Air Plan*

Within the Bay Area, the Bay Area Air Quality Management District (BAAQMD) developed the 2017 Clean Air Plan, which lays the groundwork for the Bay Area to reach regional GHG reduction goals (BAAQMD 2017a). Additionally, the BAAQMD CEQA Air Quality Guidelines provides thresholds and guidance for greenhouse gas emissions for CEQA. The guidelines include a threshold of 10,000 metric tons per year (MT/yr) of $CO_2$ equivalent ($CO_2e$) for stationary-source projects that include land uses that would accommodate processes and equipment that emit GHG emissions and would require an Air District permit to operate. The threshold for general land use development is 1,100 MT/yr of $CO_2e$ (BAAQMD, 2017b). BAAQMD has established no construction-related emission thresholds.

### *Metropolitan Transportation Commission/Association of Bay Area Governments Sustainable Communities Strategy*

MTC is the federally recognized MPO for the nine county Bay Area, which includes Alameda County and the City of Oakland. On July 18, 2013, the Plan Bay Area was jointly approved by ABAG's Executive Board and by MTC. The Plan includes the region's Sustainable Communities Strategy, as required under SB 375, and the 2040 Regional Transportation Plan. The Sustainable

Communities Strategy lays out how the region will meet GHG reduction targets set by the California Air Resources Board (CARB).

As discussed in Section 4.1, *Air Quality,* on October 21, 2021, the MTC and ABAG jointly adopted Plan Bay Area 2050 as the official regional long-range plan for the Bay Area. Plan Bay Area 2050 connects the elements of housing, the economy, transportation and the environment through 35 strategies that will make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. In the short-term, the plan's Implementation Plan identifies more than 80 specific actions for MTC, ABAG and partner organizations to implement over the next five years to make headway on each of the 35 strategies (MTC & ABAG, 2021). It will be several years before the regional transportation model and county transportation models are updated to reflect Plan Bay Area 2050 (the models currently incorporate data from Plan Bay Area 2040).

## Local

### *City of Oakland General Plan*

#### Land Use and Transportation Element

The Land Use and Transportation Element (which includes the Pedestrian Master Plan and Bicycle Master Plan) of the Oakland General Plan contains the following policies that address issues related to reducing transportation-related sources of GHG Emissions and their effects on Climate Change (City of Oakland, 2007):

> ***Policy T.2.1: Encouraging Transit-Oriented Development.*** Transit-oriented development should be encouraged at existing or proposed transit nodes, defined by the convergence of two or more modes of public transit such as BART, bus, shuttle service, light rail or electric trolley, ferry, and inter-city or commuter rail.
>
> ***Policy T.2.2: Guiding Transit-Oriented Development.*** Transit-oriented developments should be pedestrian oriented, encourage night and day time use, provide the neighborhood with needed goods and services, contain a mix of land uses, and be designed to be compatible with the character of surrounding neighborhoods.
>
> ***Policy T.3.5: Including Bikeways and Pedestrian Walks.*** The City should include bikeways and pedestrian ways in the planning of new, reconstructed, or realigned streets, wherever possible.
>
> ***Policy T.3.6: Incorporating Design Feature for Alternative Travel.*** The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage use of alternative modes of transportation such as transit, bicycling, and walking.
>
> ***Policy T.4.2: Creating Transportation Incentives.*** Through cooperation with other agencies, the City should create incentives to encourage travelers to use alternative transportation options.
>
> ***Policy N.3.2: Encouraging Infill Development.*** In order to facilitate the construction of needed housing units, infill development that is consistent with the General Plan should take place throughout the City.

### Open Space, Conservation and Recreation Element (OSCAR)

The OSCAR Element includes policies that address GHG reduction and adaptation to global climate change. Listed below are OSCAR policies that encourage the provision of open space, which increases vegetation area (trees, grass, landscaping, etc.) to effect cooler climate, reduce excessive solar gain, and absorb $CO_2$; OSCAR policies that encourage stormwater management, which relates to the maintenance of floodplains and infrastructure to accommodate potential increased storms and flooding; and OSCAR policies that encourage energy efficiency and use of alternative energy sources, which directly address reducing GHG emissions (City of Oakland, 1996).

> ***Policy CO-12.1: Land Use Patterns Which Promote Air Quality.*** Promote land use patterns and densities which help improve regional air quality conditions by: (a) minimizing dependence on single passenger autos; (b) promoting projects which minimize quick auto starts and stops, such as live-work development, mixed use development, and office development with ground floor retail space; (c) separating land uses which are sensitive to pollution from the sources of air pollution; and (d) supporting telecommuting, flexible work hours, and behavioral changes which reduce the percentage of people in Oakland who must drive to work on a daily basis.
>
> ***Policy CO-12.4: Design of Development to Minimize Air Quality Impacts.*** Require that development projects be designed in a manner which reduces potential adverse air quality impacts. This may include: (a) the use of vegetation and landscaping to absorb carbon monoxide and to buffer sensitive receptors; (b) the use of low-polluting energy sources and energy conservation measures; and (c) designs which encourage transit use and facilitate bicycle and pedestrian travel.
>
> ***Policy CO.13.2: Energy Efficiency.*** Support public information campaigns, energy audits, the use of energy-saving appliances and vehicles, and other efforts which help Oakland residents, businesses, and City operations become more energy efficient.
>
> ***Policy CO.13.3: Construction Methods and Materials.*** Encourage the use of energy-efficient construction and building materials. Encourage site plans for new development which maximize energy efficiency.

### Historic Preservation Element

A key Historic Preservation Element policy relevant to climate change encourages the reuse of existing building (and building materials) resources, which could reduce landfill material (a source of methane, a GHG), avoid the incineration of materials (which produces $CO_2$ as a by-product), avoid the need to transport materials to disposal sites (which produces GHG emissions), and eliminate the need for materials to be replaced by new product (which often requires the use of fossil fuels to obtain raw and manufacture new material) (City of Oakland, 1998).

## *City of Oakland GHG Reduction Targets and Climate Action Plan*

In October 2018, the Oakland City Council passed Resolution 87183 adopting an interim citywide GHG emissions reduction target of 56 percent below 2005 levels by the year 2030 to keep the City on track to meet its 2050 target.

In July 2020, via Resolution 88267, Oakland City Council adopted the 2030 Equitable Climate Action Plan (ECAP), a comprehensive plan to achieve the 2030 GHG reduction target and increase Oakland's resilience to the impacts of the climate crisis, both through a deep equity lens (City of Oakland, 2020a). Alongside the 2030 ECAP, Council also adopted a goal to achieve community-wide carbon neutrality no later than 2045 (City of Oakland, 2020b). Achieving carbon neutrality will require complete decarbonization (ensuring that all mechanical systems run on clean electricity) of Oakland's building sector.

### *City of Oakland 2021-2026 Hazard Mitigation Plan*

The City of Oakland adopted the 2021-2026 Hazard Mitigation Plan to "establish and promote a comprehensive mitigation strategy and efforts to protect the whole community and environment from identified natural and manmade hazards," including climate change (City of Oakland, 2021). As discussed in the Hazard Mitigation Plan, climate change may alter exposure and vulnerability of people, property, and critical facilities to hazards including dam failure, drought, earthquake, flood, landslide, sea-level rise, severe weather, tsunami/seiche, and wildfire. The Hazard Mitigation Plan includes a range of mitigation best practices that will mitigate risks from current hazards or help reduce new risk that could result from climate change.

### *Oakland Green Building Ordinance*

The City of Oakland adopted mandatory green building standards for private development projects on October 19, 2010. All buildings or projects must comply with all requirements of the 2013 California Building Energy Efficiency Standards and subsequent updates to those standards, as well as meet a variety of checklist requirements. These standards indirectly reduce GHGs through design features lowering building energy use.

### *City of Oakland Municipal Code for Plug-in Electric Vehicle Charging Stations*

Chapter 15.04, Part 11 of the City's Municipal Code requires all new multifamily and non-residential buildings to include full circuit infrastructure for plug-in electric vehicle (PEV) charging stations for at least 10 percent of the total parking spaces. In addition, inaccessible conduits for future expansion of PEV spaces must be installed 10 percent of the total parking at non-residential buildings. The new requirements are designed to accelerate the installation of vehicle chargers to address demand.

### *City of Oakland Ordinance Requiring All-Electric Construction in Newly Constructed Buildings*

On December 1, 2020, the City of Oakland adopted Ordinance 13632 prohibiting newly constructed buildings (both residential and commercial) from connecting to natural gas or propane. Newly constructed buildings must use a permanent supply of electricity as the source of energy for all space heating, water heating (including pools and spas), cooking appliances, and clothes drying appliances.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on GHG emissions and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to GHG emissions. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan.** *(Standard Condition of Approval 42)*

***a. Greenhouse Gas (GHG) Reduction Plan Required***

**Requirement:** The project applicant shall retain a qualified air quality consultant to develop a Greenhouse Gas (GHG) Reduction Plan for City review and approval and shall implement the approved GHG Reduction Plan.

The goal of the GHG Reduction Plan shall be to increase energy efficiency and to reduce GHG emissions to at least the amount that would be achieved by committing to all of the emissions reductions strategies identified on the ECAP Consistency Checklist as the City's project-level implementation of its Equitable Climate Action Plan (adopted in 2020), which calls for reducing city-wide GHG emissions by 56 percent below 2005 levels by 2030 and 83 percent by 2050. The GHG Reduction Plan shall include, at a minimum, (a) a detailed quantified GHG emissions inventory for the project taking into consideration energy efficiencies included as part of the project (including proposed mitigation measures, project design features, those strategies being implemented and other City requirements), (b) for each ECAP Consistency Checklist strategy that the project will not meet, a quantified calculation of the additional GHG emission reductions that would have occurred had it implemented the GHG emissions reduction measure consistent with the ECAP Consistency Checklist, (c) a quantified strategy for achieving an GHG emission reduction equivalent to the reduction that would have resulted from complying with the ECAP Consistency Checklist strategy, and (d) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented.

If the project is to be constructed in phases, the GHG Reduction Plan shall provide GHG emission scenarios by phase.

Potential additional GHG reduction measures to be considered include, but are not be limited to, measures recommended in BAAQMD's latest CEQA Air Quality Guidelines, the California Air Resources Board Scoping Plan (December 2008, as may be revised), the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures (August 2010, as may be revised), the California Attorney General's website, and Reference Guides on Leadership in Energy and Environmental Design (LEED) published by the U.S. Green Building Council. The types of allowable GHG reduction measures include the following (listed in order of City preference): (1) physical design features; (2) operational features; and (3) the payment of fees to fund GHG-reducing programs (i.e., the purchase of "carbon credits") as explained below.

The allowable locations of the GHG reduction measures include the following (listed in order of City preference): (1) the project site; (2) off-site within the City of Oakland; (3) off-site within the San Francisco Bay Area Air Basin; then (4) off-site within the State of California.

As with preferred locations for the implementation of all GHG reductions measures, the preference for carbon credit purchases include those that can be achieved as follows (listed in order of City preference): (1) within the City of Oakland; (2) within the San Francisco Bay Area Air Basin; then (3) within the State of California. The cost of carbon credit purchases shall be based on current market value at the time purchased and shall be based on the project's net difference operational emissions estimated in the GHG Reduction Plan for the project as compared to the Checklist baseline.

For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be included on the drawings submitted for construction-related permits.

***b. GHG Reduction Plan Implementation During Construction***

**Requirement:** The project applicant shall implement the GHG Reduction Plan during construction of the project. For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be implemented during construction. For physical GHG reduction measures to be incorporated into off-site projects, the project applicant shall obtain all necessary permits/approvals and the measures shall be included on drawings and submitted to the City Planning Director or his/her designee for review and approval. These off-site improvements shall be installed prior to completion of the subject project (or prior to completion of the project phase for phased projects). For GHG reduction measures involving the purchase of carbon credits, evidence of the payment/purchase shall be submitted to the City for review and approval prior to completion of the project (or prior to completion of the project phase, for phased projects).

***c. GHG Reduction Plan Implementation After Construction***

**Requirement:** The project applicant shall implement the GHG Reduction Plan after construction of the project (or at the completion of the project phase for phased projects). For operational GHG reduction measures to be incorporated into the project or off-site projects, the measures shall be implemented on an indefinite and ongoing basis.

The project applicant shall satisfy the following requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. The GHG Reduction Plan requires regular periodic evaluation over the life of the project (generally estimated to be at least 40 years) to determine how the Plan is achieving required GHG emissions reductions over time, as well as the efficacy of the specific additional GHG reduction measures identified in the Plan.

**Annual Report.** Implementation of the GHG reduction measures and related requirements shall be ensured through compliance with Conditions of Approval adopted for the project. Generally, starting two years after the City issues the first Certificate of Occupancy for the project, the project applicant shall prepare each year of the useful life of the project an Annual GHG Emissions Reduction Report ("Annual Report"), for review and approval by the City Planning Director or his/her

designee. The Annual Report shall be submitted to an independent reviewer of the City's choosing, to be paid for by the project applicant.

The Annual Report shall summarize the project's implementation of GHG reduction measures over the preceding year, intended upcoming changes, compliance with the conditions of the Plan, and include a brief summary of the previous year's Annual Report results (starting the second year). The Annual Report shall include a comparison of annual project emissions to the Checklist baseline emissions reported in the GHG Plan.

The GHG Reduction Plan shall be considered fully attained when project emissions are less than the Checklist baseline, as confirmed by the City through an established monitoring program. Monitoring and reporting activities will continue at the City's discretion, as discussed below.

**Corrective Procedure.** If the third Annual Report, or any report thereafter, indicates that, in spite of the implementation of the GHG Reduction Plan, the project is not achieving the GHG reduction goal, the project applicant shall prepare a report for City review and approval, which proposes additional or revised GHG measures to better achieve the GHG emissions reduction goals, including without limitation, a discussion on the feasibility and effectiveness of the menu of other additional measures ("Corrective GHG Action Plan"). The project applicant shall then implement the approved Corrective GHG Action Plan.

If, one year after the Corrective GHG Action Plan is implemented, the required GHG emissions reduction target is still not being achieved, or if the project applicant fails to submit a report at the times described above, or if the reports do not meet City requirements outlined above, the City may, in addition to its other remedies, (a) assess the project applicant a financial penalty based upon actual percentage reduction in GHG emissions as compared to the percent reduction in GHG emissions established in the GHG Reduction Plan; or (b) refer the matter to the City Planning Commission for scheduling of a compliance hearing to determine whether the project's approvals should be revoked, altered or additional conditions of approval imposed.

The penalty as described in (a) above shall be determined by the City Planning Director or his/her designee and be commensurate with the percentage GHG emissions reduction not achieved compared to the applicable numeric significance thresholds described in the GHG Reduction Plan.

In determining whether a financial penalty or other remedy is appropriate, the City shall not impose a penalty if the project applicant has made a good faith effort to comply with the GHG Reduction Plan.

The City would only have the ability to impose a monetary penalty after a reasonable cure period and in accordance with the enforcement process outlined in Planning Code Chapter 17.152. If a financial penalty is imposed, such penalty sums shall be used by the City solely toward the implementation of the Equitable Climate Action Plan.

**Timeline Discretion and Summary.** The City shall have the discretion to reasonably modify the timing of reporting, with reasonable notice and opportunity to comment by the applicant, to coincide with other related monitoring and reporting required for the project.

# 4.3.4 Environmental Impacts and Mitigation Measures

## Significance Criteria

For the purposes of this EIR, a GHG emissions impact would be significant if implementation of the proposed Project would:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;[9] or

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of GHGs.

CEQA Guidelines Section 152064.4 gives lead agencies the discretion to determine whether to asses GHG emissions quantitatively or qualitatively. The Guidelines do not establish a bright-line quantitative threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies, or suggested by other experts, such as the CAPCOA, so long as any threshold chosen is supported by substantial evidence (refer to CEQA Guidelines Section 15064.7(c)). As discussed above, the City published its ECAP in July 2020. The Oakland ECAP meets the criteria established by the California State Office of Planning and Research in 2010 for a quailed Climate Action Plan under CEQA, by which project-level analysis can be streamlined by demonstrating compliance with a GHG reduction plan.

According to CEQA Guidelines Section 15064.4(b):

> *[I]n determining the significance of a project's greenhouse gas emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions.*

The significance of impacts shall consider the Project's impact as compared to the existing environmental setting, whether the Project exceeds a threshold of significance, and compliance with relevant GHG-related plans.[10] According to CEQA Guidelines Section 15064.4(b)(3):

> *[T]he extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions (refer to, for example, Section 15183.5(b)). Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions.*

[9] This threshold supersedes the BAAQMD threshold previously used by the City with the adoption of the ECAP.
[10] 14 CCR 15064.4(b).

# Approach to Analysis

## *Emissions Estimates*

Project-related GHG emissions fall into two categories: short-term emissions due to construction, and long-term, on-going emissions due to project operations. Estimated construction- and operation-related emissions are presented in **Table 4.3-1** and **Table 4.3-2**, respectively. In addition, the Project is evaluated for consistency with the Oakland ECAP.

**TABLE 4.3-1**
**PROJECT GHG EMISSIONS FROM CONSTRUCTION**

| Year | MT $CO_2e$ |
|---|---|
| 2023 | 606.2 |
| 2024 | 393.2 |
| Project Total | 999.4 |
| Project Life | 40 |
| Annual Emissions Amortized Over Project Life | 25.0 |

NOTES:
[a] The analysis presented in this section assumes construction to begin in 2023. A later construction start date would result in lower emissions than presented in this analysis because emissions are expected to decrease over time due to improvements in technology and regulatory requirements.

SOURCE: Appendix C.

**TABLE 4.3-2**
**TOTAL PROJECT GHG EMISSIONS**

| Year | MT $CO_2e$ |
|---|---|
| Area Sources | <0.01 |
| Electricity Use | 121.8 |
| Mobile Emissions | 3,574.4 |
| Offroad Equipment + Truck Idling | 492.7 |
| Emergency Generator | 6.7 |
| Solid Waste | 263.1 |
| Water and Wastewater | 88.0 |
| Total Operational Emissions | 4,546.7 |
| Amortized Construction Emissions (Over 40 Years) | 25.0 |
| **Total Project GHG Emissions** | **4,571.7** |

SOURCE: Appendix C.

GHG emissions associated with construction and operation of the Project were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod is an approved emissions inventory software program that allows the user to estimate criteria pollutant and GHG emissions from land use development project.

GHG emissions would be generated during construction from use of heavy-duty construction equipment onsite, as well as vehicles transporting workers, equipment, and materials to and from the site. Consistent with city methodology, construction emissions are amortized over a project life of 40 years for consideration with operational emissions which are discussed further below. Amortized GHG emissions that would be generated from construction are presented in Table 4.3-1.

Operation of the Project would generate direct GHG emissions from vehicle trips generated to and from the Project site, testing and maintenance of the proposed emergency generator and to a smaller extent from area sources such as landscaping activities. Additionally, GHGs would be generated indirectly by electrical and water demand, and wastewater and solid waste generation.

Operational emission as estimated using CalEEMod version 2020.4.0 are presented in Table 4.3-2.

## Project Impacts and Discussion

**Impact GHG-1: The Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. (Criterion 1) (*Less than significant with SCAs*)**

Both BAAQMD and CAPCOA consider GHG impacts to be exclusively cumulative impacts in that no single project could, by itself, result in a substantial change in climate. Therefore, the evaluation of GHG emissions impacts assesses whether the Project would make a considerable contribution to cumulative climate change effects. The City of Oakland's current adopted thresholds for GHG emissions rely upon the technical and scientific basis for the City's 2030 ECAP, which provide substantial evidence that adherence to the 2030 ECAP action items will achieve GHG emissions reduction targets of at least 56 percent below 2005 levels by 2030 and 83 percent below 2005 levels by 2050. These reduction targets are more aggressive than the state's adopted 2030 reduction target of 40 percent below 1990 levels (per AB 32). Therefore, reductions below the City of Oakland's reduction targets also meet the state's adopted 2030 goals.

The Project Applicant prepared an ECAP Consistency Checklist (ECAP Checklist) for the Project (see Appendix F). The purpose of the ECAP Checklist is to determine, for purposes of compliance with CEQA, whether a development project complies with the ECAP and the City's GHG emissions reduction targets. According to the Project's ECAP Checklist, the Project has not committed to all applicable GHG emissions reduction strategies, and would, therefore, be required to comply with SCA GHG-1, GHG Reduction Plan, that requires a project-level GHG Reduction Plan quantifying how alternative reduction measures will achieve the same or greater emissions than would be achieved by meeting the ECAP Checklist. According to the ECAP Checklist, the Project complies with all applicable ECAP Checklist items, with the exception of Checklist Item #2. Therefore, a GHG Reduction Plan (GHGRP, see Appendix G) has been prepared for the Project consistent with SCA GHG-1, that would reduce Project GHG emissions through alternative reduction measures to meet the requirements of SCA GHG-1 and achieve the same or greater emissions reductions than would be achieved by meeting the ECAP Checklist Item #2 (See Appendix F).

Regarding ECAP Checklist Item #2, while parking provided by the Project is consistent with the amount of parking allowed under the Planning Code, it exceeds the minimum parking requirements. According to the City of Oakland Planning Code Section 17.116.090, a minimum of 121 parking spaces would be required for the industrial component of the Project and 17 parking spaces would be required for the retail component of the Project. Therefore, the Project would exceed the minimum parking requirements by 157 spaces. For a conservative analysis of the GHG impacts, the GHGRP assumed that each parking space eliminated onsite would result in two fewer daily employee one-way trips, for a total of 314 fewer one-way trips per day.[11]

Based on the Transportation Memorandum prepared by Fehr & Peers, the Project would generate approximately 2,130 trips per day, 1,600 of which would be from the industrial component, and 530 of which would be generated from the retail component of the Project.[12] Of these daily trips, 1,100 would be associated with passenger automobiles, and the remainder would be associated with trucks. A reduction of 157 parking spaces would reduce the number of passenger automobile trips by 314 trips, resulting in a total of 786 passenger vehicle trips per day.

In order to determine the GHG reductions that would result from minimizing the allowable parking on the Project site, mobile source emissions were calculated for the reduced parking scenario, based on the assumption that reduced parking would reduce the number of daily automobile trips associated with the industrial component of the Project by 314 daily trips. Mobile-source emissions under the reduced parking scenario were then compared to mobile-source emissions that would result from the Project, as proposed. Overall, it was determined that reducing parking to the minimum required by Code would result in an annual reduction of 257.2 MT $CO_2$e.

The GHGRP identified two alternative reduction measures: (1) implement a mandatory commute trip reduction program, and (2) install rooftop solar on approximately 25 percent of the Project's roof area (160,080 square feet). As shown in **Table 4.3-3**, providing a mandatory commute trip reduction program would result in emission reductions of 180.4 MT $CO_2$e per year and rooftop solar over 106,080 square feet of the Project roof area would result in emission reductions of 120.1 MT $CO_2$e per year. Overall, the measures identified in the GHGRP would reduce GHG emissions by 300.5 MT $CO_2$e which is greater than the emissions that would have been reduced with implementation of ECAP Checklist Item #2 (257.2 MT $CO_2$e). SCA GHG-1 also contains reporting requirements and corrective procedures to ensure the implementation of the GHG Reduction Plan. Therefore, with implementation of SCA GHG-1, Project GHG emissions associated with land use development would be less than significant.

The Project would include a backup diesel emergency generator, which would represent a new stationary source of GHG emissions. According to the City's GHG thresholds, for projects that involve both a stationary source and a land use development, the stationary source emissions should be calculated separately and compared to the stationary source threshold. The air quality modeling and analysis for the Project (see Section 4.1, *Air Quality*, above) also calculated the

[11] This is a conservative assumption because it assumes that all of the project's parking spaces are fully occupied every day, and each parking space accommodates one worker's daily commute (two one-way trips).

[12] Since the office component of the Project is not a standalone use and is part of the normal operation of the warehouse, it is considered an accessory part of the warehouse and the trip generation rate for the warehouse use applies to the whole Project.

GHG emissions that would be generated by stationary sources associated with the Project. Stationary source-related emissions would total approximately 6.7 MT $CO_2e$ annually, which is below City and BAAQMD threshold for stationary sources of 10,000 metric tons $CO_2e$ per year. Therefore, GHG emissions associated with the Project's emergency generator (stationary source) would also be less than significant.

**TABLE 4.3-3**
**GHGRP MEASURES**

| GHGRP Measure | GHG Emissions Reductions (MT $CO_2e$) |
|---|---|
| Implement a Mandatory Commute Trip Reduction Program[a] | 180.4 |
| Install Rooftop Solar PV System[b] | 120.1 |
| **Total Reductions from GHGRP Measures** | **300.5** |

NOTES:
[a] Emissions reductions calculated based on the guidance included in the Handbook for Analyzing Greenhouse Gas Emissions Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (SMAQMD, et al., 2021).
[b] Emissions reductions calculated based on the maximum solar coverage of 106,080 square feet, which is equivalent to 1,675 kW of solar capacity.

SOURCE: Appendix G.

Although not required to mitigate a significant impact related to GHG emissions, the Project would be required to implement several other City of Oakland SCAs that would contribute to minimizing potential GHG emissions from Project construction and operations. These include SCA AIR-2, Criteria Air Pollutant Controls - Construction Related, SCA AIR-3, Diesel Particulate Matter Controls - Construction Related, SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling, SCA AES-3, Landscape Plan, SCA TRANS-2, Bicycle Parking, SCA TRANS-3, Transportation and Parking Demand Management Plan, SCA TRANS-4, Plug-In Electric Vehicle (PEV) Charging Infrastructure, and SCA UTIL-3, Green Building Requirements.

**SCA GHG-1: GHG Reduction Plan.**

**SCA AES-3: Landscape Plan.** See Section 4.7.1.2.

**SCA AIR-2: Criteria Air Pollutant Controls - Construction Related.** See Section 4.1.3.

**SCA AIR-3: Diesel Particulate Matter Controls - Construction Related.** See Section 4.1.3.

**SCA TRANS-2: Bicycle Parking.** See Section 4.6.2.

**SCA TRANS-3: Transportation and Parking Demand Management Plan.** See Section 4.6.2.

**SCA TRANS-4: PEV Charging Infrastructure.** See Section 4.6.2.

**SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** See Section 4.7.13.2.

**SCA UTIL-3: Green Building Requirements.** See Section 4.7.13.2.

**Mitigation:** None required.

---

**Impact GHG-2: The Project would not fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions. (Criterion 2) (*Less than Significant with SCAs*)**

The Project would comply with the City of Oakland's ECAP, current City Sustainability Programs, as well as General Plan policies and regulations and other local, regional and statewide plans, policies and regulations related to GHG emissions reduction. As discussed in detail in Section 4.7, the Project would be consistent with *Plan Bay Area 2040*.

Specifically, the Project would be consistent with the state's 2017 Climate Change Scoping Plan and the City of Oakland's ECAP in that it has prepared a GHG Reduction Plan pursuant to SCA GHG-1 that would reduce Project GHG emissions the same or greater than would be achieved by meeting all of the ECAP Checklist items (see Impact GHG-1). The Project would be required to implement SCA GHG-1, which would ensure the implementation of the GHG Reduction Plan for the Project.

The 2017 Climate Change Scoping Plan is intended to guide the State to achieving its target of reducing GHG emissions to 40 percent below 1990 levels by 2030, and substantially advance toward the 2050 goal of 80 percent below 1990 levels. The 2017 Climate Change Scoping Plan outlines the various programs throughout the State that will contribute to the achievement of GHG reduction goals including the Low Carbon Fuel Standard, the Renewables Portfolio Standard, the Advanced Clean Cars Program, the Sustainable Freight Action Plan, a more stringent Cap-and-Trade Program, and other programs that will deliver climate and other benefits (CARB, 2017). The Project would not conflict or otherwise interfere with the statewide GHG reduction measures identified in CARB's 2017 Scoping Plan Update. For example, the proposed building would be constructed in conformance with California Green Building Standards (CALGreen) Code (CCR Title 24, Part 11) and the Title 24 Building Code, as discussed further below.

The 2022 Scoping Plan is the State's roadmap for achieving net zero GHG emissions by 2045 and to reduce statewide anthropogenic GHG emissions at least 85 percent below 1990 levels by 2045. The 2022 Scoping Plan also updates the statewide plan to achieve the SB 32 target of reducing emissions to 40 percent below 1990 levels by 2030. Because the Project would be built out and fully operational by 2024, well before 2030, the 2022 Scoping Plan's strategies for achieving the State's 2045 target are less relevant to the Project. Therefore, the Project's consistency with the statewide target for 2030 is the relevant statewide plans related to GHG emissions reduction for the purposes of this analysis. As discussed above, the Project would be consistent with the 2017 Climate Change Scoping Plan and statewide target for 2030 via the ECAP Checklist and SCA GHG-1.

On December 15, 2020, the Oakland City Council adopted an Ordinance, adding to the Oakland Municipal Code Chapter 15.37, "All-Electric Construction in Newly Constructed Buildings." These new regulations require all newly constructed buildings to meet the definition of an All-Electric Building, as defined therein. As a result, the Project would be designed to use a permanent supply of electricity as the source of energy for all space heating, water heating, appliances, and clothes drying appliances, and would be prohibited from having natural gas or propane plumbing installed in the building. This would lower the estimated annual operational greenhouse gas emissions from energy emission sources of the Project.

The Project would seek LEED Silver level certification consistent with the City's green building requirements, and would comply with the CALGreen Code, and Title 24 building energy and water efficiency requirements. The Project would also meet the most recently implemented Building Energy Efficiency Standards.

Furthermore, compliance with the plans, policies, and regulations discussed above would limit the Project's contribution to climate change, thereby reducing the Project's contribution to the hazards of interest discussed in the City's Hazard Mitigation Plan. Therefore, the Project would also be consistent with the Hazard Mitigation Plan.

The Project would be consistent with all applicable goals, policies and regulations adopted to reduce GHG emissions and this impact would be less than significant.

**SCA GHG-1: GHG Reduction Plan.**

**SCA UTIL-3: Green Building Requirements.** See Section 4.7.13.2.

**Mitigation:** None required.

---

## 4.3.5 References

Alameda County. 2009. *Alameda County Community Greenhouse Gas Emissions 2005 Roll-Up Inventory, Methodology, and Results.* Accessed April 2022. https://www.acgov.org/climate/documents/2009-02-09_County_climate_inventory-summary.pdf.

Bay Area Air Quality Management District (BAAQMD). 2017a. *Final 2017 Clean Air Plan*, April 2017. Accessed April 2022. https://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. 2017b. *BAAQMD CEQA Guidelines, California Environmental Quality Act Air Quality Guidelines*. May 2017. Accessed April 2022. http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en.

California Environmental Protection Agency (Cal EPA). 2013. *Preparing California for Extreme Heat: Guidance and Recommendations*. October 2013. Accessed April 2022. https://toolkit.climate.gov/reports/preparing-california-extreme-heat-guidance-and-recommendations.

California Air Resources Board (CARB). 2022a. *California Greenhouse Gas Emissions for 2000 to 2020.* October 26, 2022. Accessed April 2023. https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf.

CARB. 2017. *California's 2017 Climate Change Scoping Plan*. Published November 2017. Accessed February 2019. https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm.

CARB. 2022b. *2022 Scoping Plan for Achieving Carbon Neutrality*. Published December 2022. Accessed April 2023. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.

City of Oakland. 2020a. *2030 Equitable Climate Action Plan*. Adopted June 20, 2020.

City of Oakland. 2020b. Resolution No. 88268: Resolution Approving Preliminary Planning Targets for Development of the Draft Oakland Energy and Climate Action Plan. June 20, 2020.

City of Oakland. 2020c. *2017 Greenhouses Gas Emissions Inventory Report.* June 2020. Accessed April 2022. https://cao-94612.s3.amazonaws.com/documents/2020-Oakland-GHG-Inventory-Report-2017-data-year.pdf.

City of Oakland. 2007. *Land Use and Transportation Element of the Oakland General Plan*. March 24, 1998, amended to June 21, 2007.

City of Oakland. 1998. *Historic Preservation Element of the Oakland General Plan*. March 8, 1994, amended July 21, 1998.

City of Oakland. 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*. Adopted June 11, 1996.

Climate Central. 2019. *2018 Global Temperature Review: Land & Ocean.* Accessed April 2022. https://www.climatecentral.org/gallery/maps/2018-global-temp-review-land-ocean. Published February 6, 2019.

CNRA. 2018a. *Safeguarding California Plan: 2018 Update*. Accessed April 2022. http://resources.ca.gov/climate/safeguarding/.

CNRA. 2016. *Safeguarding California: Implementation Action Plans.* Accessed May 2022. https://resources.ca.gov/CNRALegacyFiles/docs/climate/safeguarding/Safeguarding%20California-Implementation%20Action%20Plans.pdf.

CNRA. 2014. *Safeguarding California: Reducing Climate Risk, an Update to the 2009 California Climate Adaptation Strategy*. Accessed April 2022. http://resources.ca.gov/climate/safeguarding/.

CNRA. 2009. *2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008*. Accessed April 2022. https://resources.ca.gov/CNRALegacyFiles/docs/climate/Statewide_Adaptation_Strategy.pdf.

Coastal and Ocean Working Group of the California Climate Action Team (CO-CAT). 2013. Ocean Protection Council's Science Advisory Team, and the California Ocean Science Trust (OPC), *State of California Sea-Level Rise Guidance Document March 2013 Update*. March 2013.

Intergovernmental Panel on Climate Change (IPCC). 2007. Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Accessed April 2022. https://www.ipcc.ch/assessment-report/ar4/.

IPCC. 2014. *Climate Change 2014 Synthesis Report.* Accessed April 2022. http://ipcc.ch/report/ar5/syr/.

Kenward, Alyson, PhD, Dennis Adams-Smith, Urooj Raja. 2013. *Wildfires and Air Pollution: The Hidden Health Hazards of Climate Change. Climate Central*. Accessed April 2022. http://assets.climatecentral.org/pdfs/WildfiresAndAirPollution.pdf.

National Aeronautic and Space Administration (NASA). 2015. *Scientific consensus: Earth's climate is warming.* Updated September 2015. Accessed April 2022. http://climate.nasa.gov/scientific-consensus/.

NOAA. 2019. *Assessing the U.S. Climate in 2018*. Published February 6, 2019. Accessed April 2022. https://www.ncei.noaa.gov/news/national-climate-201812.

Office of Planning and Research (OPR). 2018. *California's Fourth Climate Change Assessment.* Accessed April 2022. https://www.climateassessment.ca.gov/.

U.S. Environmental Protection Agency (U.S. EPA). 2012. *United States Environmental Protection Agency and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks*. EPA-420-F-12-051. Accessed April 2022. https://nepis.epa.gov.

U.S. EPA. 2022. *Inventory of U.S. Greenhouse Gas Emissions and Sinks.* Accessed April 2022. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks#:~:text=In%202020%2C%20U.S.%20greenhouse%20gas,sequestration%20from%20the%20land%20sector).

Westerling, Anthony LeRoy. 2018. *Wildfire Simulations for the Fourth California Climate Assessment: Projecting Changes in Extreme Wildfire Events with a Warming Climate*. California's Fourth Climate Change Assessment, California Energy Commission. Publication number: CCCA4-CEC-2018-014.

# 4.4 Hazards and Hazardous Materials

## 4.4.1 Introduction

This section presents hazards and hazardous materials conditions in the Project vicinity and evaluates the potential for the construction or operation of the proposed Project to result in significant impacts related to exposing people or the environment to adverse hazards and hazardous materials conditions; and impairment of emergency response and access plans. The section first includes a description of the existing environmental setting as it relates to hazards and hazardous materials in the Project vicinity and provides a regulatory framework that discusses applicable state and local regulations. The section then includes an evaluation of potential impacts of the Project.

This section relies in part on the site-specific technical reports listed below, prepared in support of the Project:

- Apex. 2021. *Phase II Environmental Site Assessment, Former Owens-Brockway Glass Facility, 3600 Alameda Avenue, Oakland, California*. October 21.
- CKG. 2020. *Revised Updated Facility Closure Plan, Owens-Brockway Glass Container Inc. Facility, 3600 Alameda Avenue, Oakland, California*. May 7.
- CKG. 2021. *Application for Cleanup of Polychlorinated Biphenyls Owens-Brockway Glass Container Inc., 3600 Alameda Avenue, Oakland, California*. October 22.

## 4.4.2 Environmental Setting

### Definitions of Hazardous Materials

Definitions of terms used in the characterization of baseline conditions, regulatory framework, and impact analysis for hazards and hazardous materials are provided below.

- **Hazardous Material:** The term "hazardous material" can have varying definitions depending on the regulatory programs. For the purposes of this Draft EIR, the term refers to both hazardous materials and hazardous wastes. The California Health and Safety Code Section 25501(n) defines hazardous material as any material that because of its quantity, concentrations, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.
- **Hazardous Waste:** A "hazardous waste" is a waste that because of its quantity, concentration, or physical, chemical, or infectious characteristic, causes or significantly contributes to an increase in mortality or illness or poses substantial or potential threats to public health or the environment (42 U.S.C. 6903(5)). Hazardous wastes are further defined under the Resource Conservation and Recovery Act (RCRA) as substances exhibiting the characteristics of ignitability, reactivity, corrosivity, or toxicity. Chemical-specific concentrations used to define whether a material is a hazardous, designated, or nonhazardous

waste include Total Threshold Limit Concentrations (TTLCs), Soluble Threshold Limit Concentrations (STLCs), and Toxic Characteristic Leaching Procedure (TCLPs), listed in CCR Title 22, Chapter 11, Article 3, Section 66261, and used as waste acceptance criteria for landfills. Waste materials with chemical concentrations above TTLCs, STLCs, and TCLPs must be sent to Class I disposal facilities, which are permitted to accept hazardous waste at concentrations above TTLCs, STLCs, and TCLPs.

- **Screening Levels for Hazardous Materials in Soil, Soil Gas, or Groundwater:** The U.S. Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) and San Francisco Bay Area Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (ESLs) are guidelines used to evaluate the potential risk associated with chemicals found in soil or groundwater where a release of hazardous materials has occurred. Screening levels have been established for both residential and commercial/industrial land uses, and for construction workers. Residential screening levels are the most restrictive. Soil with chemical concentrations below RSLs and ESLs generally would not require remediation and would be suitable for unrestricted uses if disposed of offsite. Commercial/industrial screening levels are generally less restrictive than residential screening levels because they are based on potential worker exposure to hazardous materials in the soil (and these are generally less than residential exposures). Screening levels for construction workers are also less restrictive than for commercial/industrial workers because construction workers are only exposed to the chemical of concern for the duration of construction, while industrial workers are assumed to be exposed over a working lifetime. Chemical concentrations below these screening levels generally would not require remediation and would be suitable for unrestricted uses. In addition, there are other more specific but similar screening levels used more narrowly focused human health or ecological risk assessment considerations.

## Site Conditions

The Project site is located north of the Oakland Estuary and Alameda Avenue, with Fruitvale Avenue to the west, a former retail center to the east, and a mix of commercial, industrial, and residential land uses to the north (see Figure 3-1). The Phase II environmental site assessment (Apex, 2021), the revised updated facility Closure Plan (CKG, 2020), and the Application for Cleanup of Polychlorinated Biphenyls (CKG, 2021) conducted for the Project site include summaries of the site history; documentation of the results of the testing of building materials, soil gas, soil, and groundwater; cleanup activities; and a discussion of the results. The results summarized below are based on the Phase II assessment, the Closure Plan, and the PCB cleanup application, unless otherwise cited.

### *Site History*

The Project site was originally developed with an asphalt refinery operated at the southwest portion of the site from 1902 until 1916. Investigations completed to date indicate that petroleum hydrocarbons associated with the former asphalt refinery have impacted soil and groundwater at the southwest corner of the site.

Construction of the former Owens-Brockway Glass Facility started in 1936, with operations beginning in 1938. The plant operated uninterrupted until October 2015. Originally, the facility included five glass melting furnaces and employed over 1,000 people. Over the years, three of the furnaces were shut down and at the time of closure in 2015, only two furnaces were operating.

Facilities included the raw materials batch house, the furnaces and furnace buildings, the glass forming building and associated machinery, and warehousing. The Project site and areas discussed below, including numbered building sites[1] and offsite parcels, are shown on **Figure 4.4-1**.

### *Facility Closure, Investigation, and Remediation*

After the facility was closed in 2015, a facility-wide remediation (i.e., cleanup) program was initiated in which the majority of all hazardous materials were collected and removed from the site. Underground fuel storage tanks (USTs) were installed in 1936 to provide fuel storage to operate furnaces and mobile equipment but were removed in 1986. Fuel releases associated with these underground fuel storage tanks were investigated and remediated under the jurisdiction of the Alameda County Department of Environmental Health (ACDEH).

In general, the investigations indicate that facilities associated with Buildings 6 through 10 and the Mobile Equipment Maintenance area have hazardous material containing equipment or residual hazardous materials in building materials, soil, soil gas, and/or groundwater. Consequently, the ACDEH, the overseeing regulatory agency, has required further investigation and remediation regarding the areas of Buildings 6 through 10, the Mobile Equipment Maintenance Area, and the proper management of materials contained therein, including glass raw materials, batch, or treatment residue; glass forming machines with oily residues; oil-water separator and trenches; maintenance equipment; fuel and lubricant storage equipment or other equipment with grease residue. The closure plan noted that hazardous building materials, such as lead-based paint (LBP) and polychlorinated biphenyls (PCBs) are anticipated to be encountered during demolition of the buildings and structures, and that the hazardous materials will need to be properly contained, removed, and disposed of in accordance with all applicable laws and regulations.

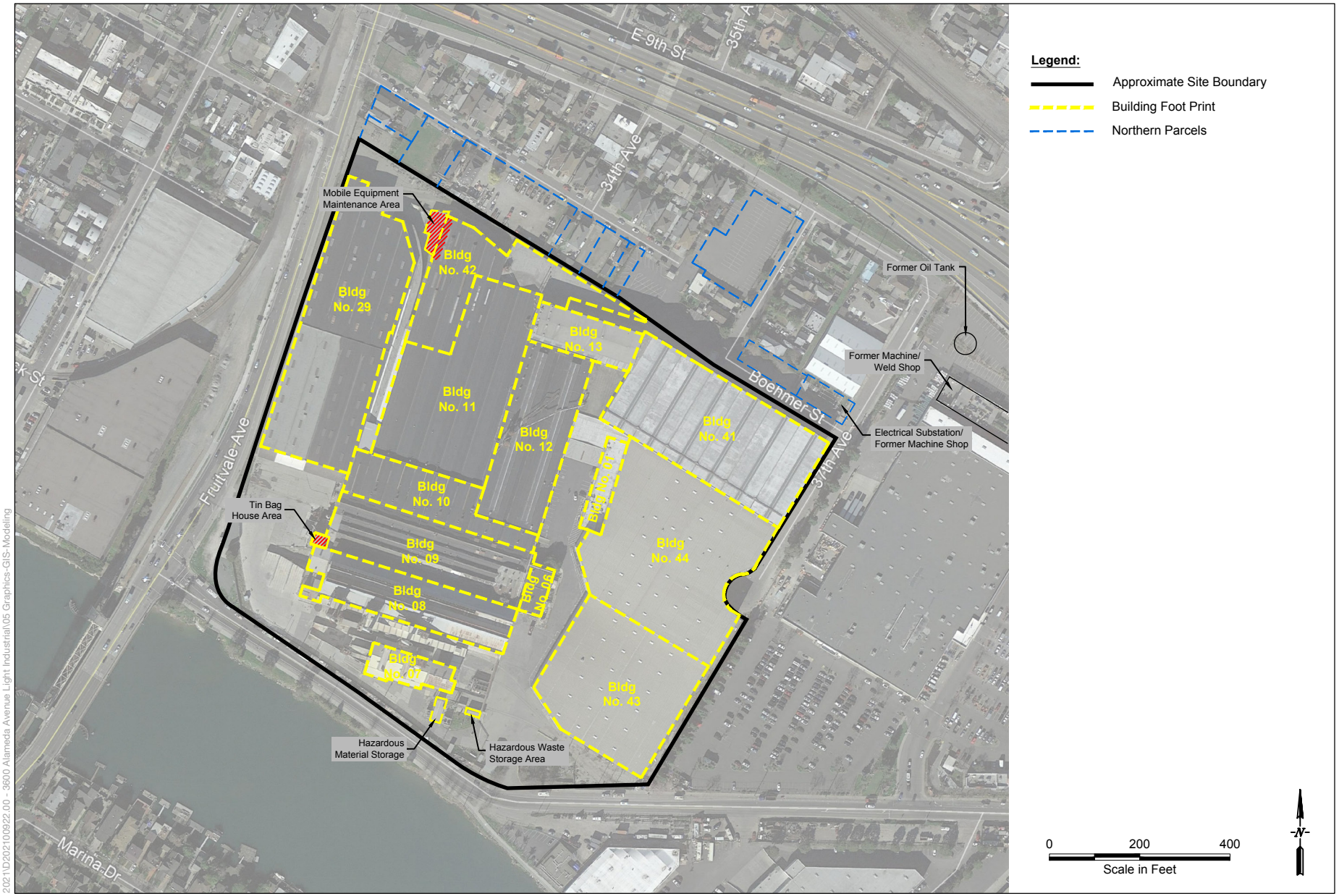
In addition, the investigations included the "Northern Parcels," which are located adjacent to and along the north border of the Project site. Although the Northern Parcels are an offsite area, they are adjacent to the Project site and are known to have contamination that has extended onto the Project site. Therefore, the Northern Parcels testing results discussed below are included in the discussion of onsite conditions.

The areas with chemical concentrations above ESLs or RSLs are summarized below by area.

#### Building 08 and Portion of Building 09

Building 08 and the southern portion of Building 09 have a basement area that previously contained five glass-making furnaces, which were all located within Building 08. In 1988, a glass leak at one of the furnaces caused molten glass to engulf a bank of transformers that contained polychlorinated biphenyl (PCB) oil located adjacent to the furnace. The resulting fire caused a release of PCBs, dioxins, and furans to the furnace building's basement walls, floor, and

[1] The building numbers are from the Apex Phase II assessment; other reports (e.g., CKG 2021) are known to use different building numbers,




2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: APEX, 2021

3600 Alameda Industrial Project

**Figure 4.4-1**
Existing Building Designations

ESA

superstructure.[2] The incident was reported to the U.S. Environmental Protection Agency (USEPA) and investigation and cleanup oversight was provided by the State of California Department of Toxic Substances Control (DTSC). The furnace building's basement walls, floors and overhead structures were scrubbed until either PCBs were not detected or they were below the risk-based threshold determined to be protective of industrial workers. Because the cleanup goal could not be met at one location on the glass furnace building basement's southern wall, the wall was encapsulated with an epoxy sealant. The DTSC and EPA granted closure for the PCB release in 1992. Subsequent investigations indicate that residual PCB impacts remain in the furnace building basement's concrete wall and floor, as well as the soil underlying the furnace building's basement. Data collected to date indicate PCBs do not appear to be mobile in groundwater downgradient of the release. PCBs have been detected in soil beneath the building floor at concentrations above the industrial worker RSLs and ESLs, and above construction worker ESLs.[3] As discussed in Section 3.3, *Project Characteristics*, the proposed Project use is assumed to be a distribution warehouse.

### Hazardous Materials Storage and Hazardous Waste Storage Areas

Areas at the southeast corner of Building 07 were used to store hazardous materials and hazardous waste. Trichloroethene (TCE) has been detected in soil vapor beneath this area at concentrations above the residential and commercial use vapor intrusion ESL. Perchloroethene (PCE) has been detected in groundwater at concentrations above the residential and commercial ESL just west of the Hazardous Materials Storage Area and just north of the nearby Building 07. Benzene has been detected in groundwater at concentrations above the residential and commercial ESL in the area in between the Hazardous Materials Waste Storage Area and the nearby Building 06.

Benzene has been detected in soil vapor at concentrations above the residential and commercial vapor intrusion ESLs centered the under Hazardous Materials Storage and Hazardous Waste Storage Areas and extending to under most of the southern and central portions of the Project site.

### Mobile Equipment Maintenance Area

This area is located at the northwest corner of Building 42 and was used for vehicle maintenance. Arsenic and lead have been detected in soil at concentrations above the construction worker, residential, and commercial/industrial ESLs. The extent of arsenic and lead has been characterized and is limited to this area.

### Tin Bag House Area

A bag house is an air pollution control device and dust collector system that uses fabric bag filters to remove particulates or gas released from industrial processes out of the air. The Tin Baghouse area is located at the southwest corner of Building 09 where arsenic and lead have been detected in soil at concentrations above the construction worker, residential, and commercial/industrial ESLs. The origin of the lead and arsenic is unknown, but it does not appear to be associated with hazardous materials usage at the Tin Baghouse. The extent of arsenic and lead has been

2 The dioxins and furans are a byproduct of the combustion of PCB-containing oil.

3 RSLs have not been established for construction workers.

characterized and is limited to this area. The Tin Bag House may have residues of monobutyl tin oxide on the inside of the metals surfaces. However, metal recyclers have stated that they can accept this material.

#### Northern Parcels Area

As previously discussed, although the Northern Parcels are not a part of the Project site, they are adjacent to the Project site and are known to have contamination that has migrated onto the Project site. Therefore, the testing results discussed below are included in the discussion of onsite conditions.

##### Eastern Area at Current Electrical Substation/Former Machine Shop

The current offsite electrical substation, located adjacent and north of the northeast corner of the Project site, was formerly a machine shop. In addition, a former machine and welding shop was located just further to the east and a former oil tank was located just further to the northeast. Investigations to date have concluded that chlorinated solvents, including PCE) and its chlorinated breakdown products, such as TCE, have been detected in soil vapor, soil, and groundwater at this source area and extend onto the Project site in the eastern corner area of Building 41. In addition, benzene has been detected in soil vapor at concentrations above the residential and commercial ESLs.

##### Central Area North of Building 13

TPH as gasoline, PCE, and TCE were detected at concentrations above their respective residential and commercial soil vapor ESLs in the central portion of the Northern Parcels area. The investigations to date concluded that area with soil vapor concentrations above the ESLs extends south onto the Project site but does not extend as far south as Building 13.

##### Western Area North of Building 29

Benzene has been detected in soil vapor at concentrations above the residential and commercial ESLs in the western area offsite and onsite and just north of Building 29.

### *Summary*

As discussed above, various chemicals have been detected in soil vapor, soil, and groundwater at various locations throughout the Project site. Note that the extents of the detected chemicals are based on the samples collected to date but the presence of buildings and utilities limits the available sampling locations. In addition, the investigations also indicated residual levels of various chemicals at concentrations below ESLs or RSLs.

## Proximity to Sensitive Receptors

There are no schools within 0.25 mile of the Project site. The nearest school is the Ascend Elementary School, located about 0.3 miles to the northeast. While not within 0.25 mile of the Project site, given that the Ascend Elementary School is still in proximity to the Project site and will be analyzed in Impact HAZ-2 in the Project Impacts and Discussion.

The following hospitals and medical facility are within two miles of the Project site.

- Highland Hospital at 1411 East 31st Street in Oakland, located 1.9 miles to the north.
- Kaiser Medical Offices at 2417 Central Avenue in Alameda, located 0.8 miles to the west. Note that this facility is on Alameda Island on the other side of the Oakland Estuary.

The following daycare facilities are located within two miles of the Project site.

- Tommy's Daycare 1300 Derby Avenue, Oakland
- Alameda Island Kids At Edison, 2700 Buena Vista Avenue, Oakland
- Happy Little World Child Care, 1214 Oak Street, Alameda
- Bartell Childcare and Learning Center, 2168 Vicksburg Avenue, Oakland
- Ms. Meika's Childcare, 1272 26th Avenue, Oakland
- Ping Family Child Care, 2915 East 19th Street, Oakland
- Lin's Family WeeCare, 2522 Lincoln Avenue, Alameda
- Ivette's Day Care - Ivette's Family Child Care, 1514 Fernside Boulevard, Alameda
- 24 Hr Children Center, 4700 International Boulevard, Oakland
- Advance Day Care Center, 2236 International Boulevard, Oakland

## Proximity to Airports

The Project site is approximately 2.0 miles northwest of the Oakland International Airport. According to the Airport Land Use Compatibility Plan (ALUCP) for the Oakland International Airport, the Project site is not located within the Airport Influence Area, the Safety Compatibility Zone, or the Noise Compatibility Zone (Alameda County, 2010).

## Emergency Response or Evacuation Plans

The Oakland Office of Emergency Services (OES) has identified a network of evacuation routes in the General Plan Safety Element (City of Oakland, City of Oakland General Plan Safety Element, 2012). Emergency Evacuation Routes are typically along major thoroughfares. Nearby Emergency Evacuation Routes include the north-south Fruitvale Avenue along the west side of the Project site and east-west San Leandro Street about three blocks north of the Project site.

## Wildland Fires

Wildland fires in Oakland are a concern in the Oakland Hills, where wildlands abut residential development and steep terrain slows emergency vehicle access. The City has delineated a Wildfire Prevention Assessment District in the General Plan (City of Oakland General Plan Safety Element, 2012). The Project site is not located within an area at risk of wildland fires and is not within the City's Wildfire Prevention Assessment District.

The California Department of Forestry and Fire Protection (CAL FIRE) maps areas of significant fire hazard based on fuels, terrain, weather and other relevant factors. These zones, referred to as Fire Hazard Severity Zones, then determine the requirements for special building codes designed to reduce the ignition potential of buildings. The Project site is not located within a Very High Fire Hazard Severity Zone (CAL FIRE, 2007, 2008).

## 4.4.3 Regulatory Setting

### Federal

The primary federal agencies with responsibility for hazardous materials management include the U.S. Environmental Protection Agency (U.S. EPA), U.S. Department of Labor Occupational Safety and Health Administration (Fed/OSHA), and the U.S. Department of Transportation (USDOT). Federal laws, regulations, and responsible agencies that are relevant to the Project are summarized in **Table 4.4-1**.

**TABLE 4.4-1**
**FEDERAL LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT**

| Classification | Law or Responsible Federal Agency | Description |
|---|---|---|
| Hazardous Materials Management | Community Right-to-Know Act of 1986 (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA)) | Imposes requirements to ensure that hazardous materials are properly handled, used, stored, and disposed of and to prevent or mitigate injury to human health or the environment in the event that such materials are accidentally released. |
| Hazardous Waste Handling | Resource Conservation and Recovery Act of 1976 (RCRA) | Under RCRA, the U.S. EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous waste from “cradle to grave.” |
| | Hazardous and Solid Waste Act | Amended RCRA in 1984, affirming and extending the “cradle to grave” system of regulating hazardous wastes. The amendments specifically prohibit the use of certain techniques for the disposal of some hazardous wastes. |
| Hazardous Materials Transportation | USDOT | USDOT has the regulatory responsibility for the safe transportation of hazardous materials. The USDOT regulations govern all means of transportation except packages shipped by mail (49 CFR). |
| Occupational Safety | Occupational Safety and Health Act of 1970 | Fed/OSHA sets standards for safe workplaces and work practices, including the reporting of accidents and occupational injuries (29 CFR 1910). |

State and local agencies often have either parallel or more stringent rules than federal agencies. In most cases, state law mirrors or overlaps federal law and enforcement of these laws is the responsibility of the state or of a local agency to which enforcement powers are delegated. For these reasons, the requirements of the law and its enforcement are discussed under either the state or local agency section.

### State

The primary state agencies with responsibility for hazardous materials management in the region include the DTSC and the RWQCB within the California Environmental Protection Agency

(Cal EPA), California Occupational Safety and Health Administration (Cal/OSHA), California Department of Health Services (CDHS), California Highway Patrol (CHP), and the California Department of Transportation (Caltrans). The state laws, regulations, and responsible agencies that are relevant to the Project are summarized in **Table 4.4-2**.

**TABLE 4.4-2**
**STATE LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT**

| Classification | Law or Responsible State Agency | Description |
|---|---|---|
| Hazardous Materials Management | Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program); CUPA (Health and Safety Code Sections 25404 et seq) | In January 1996, Cal EPA adopted regulations, which implemented a Unified Program at the local level. The agency responsible for implementation of the Unified Program is called the Certified Unified Program Agency (CUPA), which for the City of Oakland is the Alameda County Department of Environmental Health (ACDEH). |
| | California Fire Code, Title 24, Chapter 9 of the California Code of Regulations | The California Fire Code regulates the storage and handling of hazardous materials, including the requirement for secondary containment, separation of incompatible materials, and preparation of spill response procedures. |
| Hazardous Waste Handling | California Hazardous Materials Release Response Plan and Inventory Law of 1985; CUPA | The California Hazardous Materials Release Response Plan and Inventory Law of 1985 (Business Plan Act) requires that businesses that store hazardous materials onsite prepare a Hazardous Materials Business Plan (HMBP) and submit it to the local CUPA, which in this case is the ACDEH. |
| | California Hazardous Waste Control Act; DTSC | Under the California Hazardous Waste Control Act, California Health and Safety Code, Division 20, Chapter 6.5, Article 2, Section 25100, et seq., DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in landfills. DTSC is also the administering agency for the California Hazardous Substance Account Act. California Health and Safety Code, Division 20, Chapter 6.8, Sections 25300 et seq., also known as the State Superfund law, providing for the investigation and remediation of hazardous substances pursuant to state law. |
| Hazardous Materials Transportation | Titles 13, 22, and 26 of the California Code of Regulations | Regulates the transportation of hazardous waste originating in and passing through the state, including requirements for shipping, containers, and labeling. |
| | CHP and Caltrans | These two state agencies have primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies. |
| Occupational Safety | Cal/OSHA | Cal/OSHA has primary responsibility for developing and enforcing workplace safety regulations in California. Because California has a federally approved OSHA program, it is required to adopt regulations that are at least as stringent as those found in Title 29 of the Code of Federal Regulations (CFR). Cal/OSHA standards are generally more stringent than federal regulations. |
| | Cal/OSHA regulations (Title 8 CCR) | Concerning the use of hazardous materials in the workplace, Cal/OSHA regulations require employee safety training, safety equipment, accident and illness prevention programs, hazardous substance exposure warnings, and emergency action and fire prevention plan preparation. |

**TABLE 4.4-2 (CONTINUED)**
**STATE LAWS AND REGULATIONS RELATED TO HAZARDOUS MATERIALS MANAGEMENT**

| Classification | Law or Responsible State Agency | Description |
|---|---|---|
| Construction Storm Water General Permit (Construction General Permit; Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ) | RWQCB | Dischargers whose project disturbs one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one of more acres, are required to obtain coverage under the *NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit; Order 2009-0009-DWQ, NPDES No. CAS000002; as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). Construction activity subject to this permit includes clearing, grading, grubbing, and other disturbances to the ground such as excavation and stockpiling, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of a facility. The Construction General Permit requires the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) that includes specific Best Management Practices (BMPs) designed to prevent sediment and pollutants from contacting stormwater from moving offsite into receiving waters. The BMPs fall into several categories, including erosion control, sediment control, waste management and good housekeeping, and are intended to protect surface water quality by preventing the off-site migration of eroded soil and construction-related pollutants from the construction area. |
| Municipal Separate Storm Sewer System (MS4) Permit NPDES No. CAS000004 and Order No. R2-2015-0049, as amended by Order R2-2019-0004 | RWQCB | The MS4 permit requires permittees (in this case, Alameda County) to reduce pollutants and runoff flows from new development and redevelopment using BMPs to the maximum extent practical. The MS4 permittee also has its own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification element. The MS4 permit requires specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process. |
| Underground Infrastructure | California Code of Regulations Section 4216-4216.9 | Section 4216-4216.9 "Protection of Underground Infrastructure" requires an excavator to contact a regional notification center (e.g., Underground Services Alert or Dig Alert) at least two days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are then notified and are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area. |

### *Summary of Federal and State Hazardous Building Materials Regulations*

As discussed in Section 4.4.2, *Environmental Setting*, the existing structures contain hazardous building materials. These hazardous materials would be removed as part of the Project. The above-listed federal and state regulations in Tables 4.2-1 and 4.2-2 list the overall regulations that regulate hazardous materials. Within those regulations are the specific hazardous materials regulations cited below that are relevant to the demolition of structures that have hazardous materials as part of their structures.

- **ACM:** CCR Title 8, Division 1, Chapter 4, Article 4, Sections 1529 and 5208; BAAQMD Regulation 11, Rule 2
- **LBP:** CCR Title 8, Division 1, Chapter 4, Article 4, Section 1532.1

- **PCBs:** RCRA: 40 CFR 761; TSCA: 15 USC 2695; California: CCR Title 22, Division 4.5, Chapter 11, Article 3, Section 66261.24
- **Mercury and/or PCBs in light tubes and switches:** CCR Title 22, Division 4.5, Chapter 12, Article 1, Sections 66262.11; 66273 et sec; and CCR Title 22, Division 4.5, Chapter 42, Sections 67426.1 through 67428.1
- **Freon (chlorofluorocarbon and hydrochlorofluorocarbon refrigerants):** California Health and Safety Code, Division 20, Chapter 6.5, Section 25143.2 and 25143.9

## Local

### *Unified Hazardous Waste and Hazardous Materials Management Regulatory Program (Unified Program)*

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

- Hazardous Materials Release Response Plans, and Inventory (also referred to as Hazardous Materials Business Plans [HMBPs])
- California Accidental Release Program
- Underground Storage Tanks
- Aboveground Petroleum Storage Spill Prevention Control and Countermeasures
- Hazardous Waste Generation and Onsite Treatment
- Uniform Fire Code Plans and Inventory Requirements

The State Secretary for Environmental Protection designated ACDEH as the local CUPA. The CUPA is charged with the responsibility of conducting compliance inspections of hazardous materials facilities in Alameda County, including the City of Oakland. These facilities handle hazardous materials, generate or treat a hazardous waste, and/or operate underground storage tanks. The CUPA uses education and enforcement to minimize the risk of chemical exposure to human health and the environment. The CUPA forwards important facility information to local fire prevention agencies that enables them to take appropriate protective action in the event of an emergency at regulated facilities. To legally store and use hazardous materials above the trigger quantities, users must apply for permits and demonstrate satisfactory compliance with regulations. The quantities that trigger disclosure are based on the maximum quantity on site at any time:

- 55 gallons, 500 pounds, or 200 cubic feet capacity for 30 days or more at any time in a year
- Any amount of hazardous waste
- Category I or II pesticides
- Explosives
- Extremely hazardous substances above the threshold planning quantity

### *Alameda County Sheriff's Office – Office of Emergency Services*

The Alameda County Sheriff's Office – Office of Emergency Services (County OES) is the lead agency for Alameda County under the Standardized Emergency Management System (SEMS; see *Emergency Response* above under state regulations), the purpose of which is to prepare the County to respond efficiently and effectively to emergencies which threaten life, property, or the environment. The County OES administers and operates the Emergency Operations Center (EOC) from which centralized emergency management can be conducted. The EOC is activated by an on-call County OES Coordinator in the event of an emergency. Under such condition, the EOC supports and coordinates emergency response and recovery operations; coordinates and works with other appropriate federal, state and other local government agencies; and prepares and disseminates emergency public information, among other responsibilities.

The Alameda County Board of Supervisors adopted the current Emergency Operations Plan (EOP) in 2012. The Alameda County operational area includes the City of Oakland. The EOP is an extension of the State's California Emergency Plan, and provides tasks, policies, and procedures for managing multi-agency and multi-jurisdictional emergency operations, public information functions and resource management. The EOP identifies several potential threats based upon a hazard analysis, including earthquakes, wildland/urban interface fire, extreme weather, public health emergency, technological and resource emergency, hazardous material incident, terrorism, floods, and landslides.

In addition, in 2011, the County OES, with participation by 12 of the incorporated cities in Alameda County including Oakland, committed to participating with the 2010 Association of Bay Area Governments Local Hazard Mitigation Plan, *Taming Natural Disasters, Multi-Jurisdictional Local Hazard Mitigation Plan for the San Francisco Bay Area*. This serves as the County's Local Hazard Mitigation Plan pursuant to the State Disaster Mitigation Act of 2000. The document identifies the County-wide mitigation strategies to be implemented by the participating agencies to reduce hazard risk and increase resiliency throughout Alameda County.

### *City of Oakland General Plan*

The *Safety Element* of the Oakland General Plan describes the following policies regarding hazards and hazardous materials, adopted for the purpose of avoiding or mitigating an environmental effect, and that apply to the Project (City of Oakland, 2012).

> ***Policy HM-1:*** Minimize the potential risks to human and environmental health and safety associated with the past and present use, handling, storage, and disposal of hazardous materials.
>
> ***Policy HM-2:*** Reduce the public's exposure to toxic air contaminants through appropriate land use and transportation strategies.
>
> ***Policy HM-3:*** Seek to prevent industrial and transportation accidents involving hazardous materials, and enhance the City's capacity to respond to such incidents.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on hazards and hazardous materials and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to hazards and hazardous materials. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA HAZ-1: Hazardous Materials Related to Construction.** *(Standard Condition of Approval 43)*

**Requirement:** The Project Applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following:

a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction;

b. Avoid overtopping construction equipment fuel gas tanks;

c. During routine maintenance of construction equipment, properly contain and remove grease and oils;

d. Properly dispose of discarded containers of fuels and other chemicals;

e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and

f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the Project Applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** *(Standard Condition of Approval 44)*

***a. Hazardous Building Materials Assessment***

**Requirement:** The Project Applicant shall submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of asbestos-containing materials (ACMs), lead-based paint, polychlorinated biphenyls (PCBs), and any other building materials or stored materials classified as hazardous materials by state or federal law. If lead-

based paint, ACMs, PCBs, or any other building materials or stored materials classified as hazardous materials are present, the Project Applicant shall submit specifications prepared and signed by a qualified environmental professional, for the stabilization and/or removal of the identified hazardous materials in accordance with all applicable laws and regulations. The Project Applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.

***b. Environmental Site Assessment Required***

**Requirement:** The Project Applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The Project Applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency.

***c. Health and Safety Plan Required***

**Requirement:** The Project Applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The Project Applicant shall implement the approved Plan.

***d. Best Management Practices (BMPs) Required for Contaminated Site***

**Requirement:** The Project Applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following:

i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements.

ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building.

**SCA HAZ-3: Hazardous Materials Business Plan.** *(Standard Condition of Approval 45)*

**Requirement:** The Project Applicant shall submit a Hazardous Materials Business Plan for review and approval by the City, and shall implement the approved Plan. The approved Plan shall be kept on file with the City and the Project Applicant shall update the Plan as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle hazardous materials and provides information to the Fire Department should emergency response be required.

Hazardous materials shall be handled in accordance with all applicable local, state, and federal requirements. The Hazardous Materials Business Plan shall include the following:

a. The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids.

b. The location of such hazardous materials.

c. An emergency response plan including employee training information.

d. A plan that describes the manner in which these materials are handled, transported, and disposed.

## 4.4.4 Environmental Impacts and Mitigation Measures

### Significance Criteria

The City of Oakland has established thresholds of significance for CEQA impacts that are consistent with those in Appendix G of the CEQA Guidelines. These adopted thresholds are presented below and have been used in the analysis.

The proposed Project would result in a significant impact relative to hazards and hazardous materials if it would:

1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

2. 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;

3. Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors;[4]

4. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

5. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 5 (i.e., the "Cortese List") and, as a result, would it create a significant hazard to the public or the environment;

6. Result in less than two emergency access routes for streets exceeding 600 feet in length unless otherwise determined to be acceptable by the Fire Chief, or his/her designee, in specific instances due to climatic, geographic, topographic, or other conditions

7. Be 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, and would the Project result in a significant safety hazard for people residing or working in the area; and

[4] Per the BAAQMD CEQA Guidelines, evaluate whether the project would result in persons being within the Emergency Response Planning Guidelines (ERPG) exposure level 2 for acutely hazardous air emissions either by siting a new source or a new sensitive receptor. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers.

8. Be located within the vicinity of a private airstrip, and would result in a significant safety hazard for people residing or working in the Project area;

9. Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, or

10. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

## Approach to Analysis

### *General*

This environmental analysis of the potential impacts related to hazards and hazardous materials is based on a review of the results of the site-specific preliminary geotechnical investigation, and a review of literature and database research.

The Project would be regulated by the various laws, regulations, and policies summarized above in Section 4.4.3, *Regulatory Setting*. Compliance by the Project with applicable federal, state, and local laws and regulations is assumed in this analysis and local and state agencies would be expected to continue to enforce applicable requirements to the extent that they do so now. Note that compliance with many of the regulations is a condition of permit approval.

A significant impact would occur if, after considering the features described in the Project Description and the required compliance with regulatory requirements, a significant impact would still occur. For those impacts considered to be significant, mitigation measures are proposed to reduce the identified impacts.

## Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- ***Wildland Fires*** (Criterion 10). The Safety Element of the City's General Plan identifies the geographic confines of the Oakland Hills as the fire prevention and assessment district boundary, designated by the California Department of Forestry and Fire Protection (CAL FIRE) as a very high fire hazard severity zone (City of Oakland, 2012; CAL FIRE, 2007, 2008). No other areas in the City, including the Project site, are considered at high risk from wildfire. The Project site is currently developed within a highly urbanized area and flat lands near Downtown Oakland, does not contain dense vegetation, and is surrounded by other developed properties and roadways. Therefore, no impact would be associated with wildland fires.

## Project Impacts and Discussion

**Impact HAZ-1: The Project would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. The Project site is located in a site that is on Government Code Section 65962.5 5. (Criteria 1, 2, and 5) (*Less than Significant with SCAs*)**

### Demolition

The Project would include the demolition of approximately 1,240,000 square feet of existing structures on the Project site. The concrete portions of demolished buildings would be tested for hazardous materials. Concrete that does not have contamination at concentrations above the regulatory action levels would be reused onsite to fill existing voids and basements, as discussed further below.

After the facility was closed, Owens-Brockway initiated a facility-wide cleanup program beginning in 2017 in which the majority of all hazardous materials were collected and removed from the site, including PCB-containing light ballasts, and mercury-containing fluorescent light tubes and fixtures. The 2020 CUPA Facility Closure Plan identifies the locations of the remaining structures, equipment, or facilities at the property that contain hazardous materials and/or contain residues of hazardous materials from previous usage.[5] As discussed in Section 4.4.2*, Environmental Setting*, in general, facilities associated with Buildings 06 through 10 are associated with residual hazardous materials impacts or hazardous material containing equipment.

Numerous soil, soil gas, and groundwater samples have been collected that characterize the nature and extent of constituents of concern (COCs) at the site. As discussed further below, some soil beneath the Building 08 and 09 basement floor has PCBs at concentrations above regulatory action levels. Soil in the areas of the Tin Bag House, and the Mobile Equipment Maintenance Area have arsenic and lead at concentrations above regulatory action levels. Soil vapor underlying portions of the Project site contains petroleum hydrocarbons and VOCs at concentrations in excess of vapor intrusion screening criteria under the commercial worker exposure scenario. A Preliminary Vapor Intrusion Conceptual Site Model (Preliminary VISCM) was prepared by Apex to evaluate vapor intrusion risk to the future worker receptor (Apex, 2023). Apex is working with ACDEH Local Oversight Program (LOP) to finalize the Preliminary VICSM, which would involve the installation of a vapor intrusion mitigation system, if necessary and required by ACDEH LOP, to protect future site users from exposure to petroleum hydrocarbon and VOC-impacted soil vapor. Groundwater has been encountered between 8 to 15 feet below ground surface (bgs) at the Project site (Kleinfelder, 2021). Concentrations of residual chemicals in groundwater (primary petroleum hydrocarbons) are above regulatory action levels.

As described in Section 4.4.2*, Environmental Setting*, some remediation has been completed for the basement of Buildings 08 and 09. The exploded transformers with PCB-containing transformer oil, and debris with PCBs, dioxins, and furans were removed from the basement, and the basement surfaces were scrubbed to remove PCBs to the extent possible. However, due to the difficulty of removing some of the contamination from the southern wall of the basement, the

[5] Note that an updated CUPA Facility Closure Plan is currently under review by the relevant regulatory agencies.

southern wall was coated with epoxy to contain and seal the PCB contamination within the concrete of the wall. Consequently, some PCB contamination is present in the basement concrete. In addition, some PCB contamination has seeped through and contaminated soil beneath the basement floor.

In summary, due to the past land uses and contamination encountered on the Project site, demolition activities will encounter building materials, soil, and soil gas, and potentially groundwater with concentrations of chemicals above regulatory action levels.

The removal of the hazardous materials will require oversight and approval of the ACDEH CUPA and other regulatory agencies (e.g., ACDEH LOP and USEPA, particularly for PCB cleanup). The closure activities to address residual hazardous materials at the site, as described in the 2020 Facility Closure Plan, will consist of selectively removing hazardous materials associated with oil cans, gear boxes, batteries, and universal waste.[6] Other facility closure activities that will be implemented include 1) implementation of the Application for Cleanup of Polychlorinated Biphenyls (PCB Cleanup Plan completed on October 25, 2022 (Apex, 2022) and conditionally approved by USEPA on December 15, 2022 (USEPA, 2022), 2) completion of any additional investigations, as required, and 3) work with the City of Oakland on redevelopment planning and demolition permitting. The Project Applicant will prepare and submit an application for a demolition permit and start the demolition process which will include hazardous building materials remedial activities as described in the PCB Cleanup Plan. All reporting and regulatory oversight related to facility closure under the CUPA and USEPA is targeted to be completed approximately eight months after all demolition activities are completed. The schedule elements may vary depending on site conditions and can be modified if needed by submitting a request to the CUPA and with CUPA concurrence.

The PCB Cleanup Plan is focused on the cleanup and encapsulation of PCBs in the former furnace basement area of Buildings 08 and 09. The USEPA-approved action levels for PCBs for this site are: (1) excavate and remove concrete and soil with concentrations above 330 milligrams per kilogram (mg/kg) and (2) eliminate the potential for construction workers to come into contact with concrete and soil with PCBs concentrations above 0.94 mg/kg. The details of the proposed PCB cleanup activities are summarized as follows:

Prior to initiation of demolition activities, the contractor will prepare and implement a dust control plan to control and collect dust generated during demolition and excavation activities. Several air monitoring stations will be established, as needed, to provide continuous monitoring for particulate matter up to 10 microns in size Particulate Matter 10 ($PM_{10}$) as a proxy for PCB emissions. Normal dust control will be done by applying potable water to work areas using a fine spray. If this measure is insufficient to control dust, or if the application of water creates

[6] Universal wastes are hazardous wastes that are widely produced by households and many different types of businesses. Universal wastes include televisions, computers and other electronic devices, as well as batteries, fluorescent lamps, mercury thermostats, and other mercury containing equipment, among others.

excessive ponding of water (leading to potential migration of contaminants by surface runoff or intrusion), then a foam or other more effective dust suppression product will be applied.

- Soil borings will be drilled through the basement floor to further refine the extent of soil that will need to be excavated and removed to reduce the volume of contaminated soil to be sent for offsite disposal.

- The portion of the southern wall where PCBs are sealed with epoxy will be removed using a handheld pneumatic or electric scabbling tool fitted with a dust shroud. The debris and dust generated during removal will be captured using a shop-vacuum certified for hazardous material removal. At least five confirmation samples will be collected from concrete in the removed wall area to verify all concrete with PCBs above a concentration of 330 mg/kg of PCBs have been removed. Additional concrete removal will continue, as needed, until confirmation samples are below the regulatory action level of 330 mg/kg.

- Concrete and soil in the floor area where previous sampling indicated soil contaminated with PCBs above 330 mg/kg will be broken up, excavated, and disposed of at a licensed offsite facility permitted to accept the waste. An estimated 69 tons of soil and 72 tons of concrete are anticipated for removal. The excavation will be conducted to two depths and extents. The shallow excavation will encompass an area of approximately 20 feet by 20 feet to a depth of 3 feet below the floor of the basement. The deeper excavation will encompass an area of approximately 10 feet by 10 feet to a depth of 16 feet below the floor of the basement. Dewatering will be conducted during the soil excavation, as needed, to minimize intrusion of groundwater, which varies from 0.5 to 1.5 feet below the floor of the basement, into the excavation. The excavation will be backfilled with control density fill (CDF).

- The lower part of the basement will be filled with crushed concrete debris derived from other parts of the Project site as it is generated during site demolition. The material placed in the basement will be tested to verify the materials are not hazardous in accordance with ACDEH LOP requirements. The total thickness of this crushed concrete layer is estimated to be approximately 7 feet and extend from 12 feet below ground surface (bgs) to 0.5 feet bgs. The upper 0. 5 feet will be comprised of finished hardscape.

- The walls of the basement will be left in place from a depth of 12 feet bgs to 0.5 feet bgs.

- Implementation of this plan will leave elevated concentrations of PCB in soil and concrete in the subsurface permanently in such a way that is protective of human health and the environment. Because hazardous materials will remain at concentrations above regulatory action levels, a land use restriction must be established for the property. The land use restriction will state that soil must not be disturbed in the vicinity of the PCB cover. The land use restriction will take the form of a land use covenant or deed restriction on the property. This document will include land use restrictions associated with petroleum hydrocarbon impacts from the former asphalt refinery, as well. As part of the land use restriction, a soil management plan, or similar document, will be developed to include a prohibition against excavating below the PCB cover and to provide for inspection of the PCB cover. A report detailing the condition of the PCB cover will be provided to USEPA on a quarterly basis initially, and as frequently as required by USEPA thereafter. The requirements in the soil management plan and the presence of a land use covenant or deed restriction or some other instrument normally examined during a title search will be recorded with the County of Alameda and will in perpetuity notify any potential purchaser of the existence of the PCB cover and any inspection and/or monitoring the requirements consistent with 40 CFR Section 761.61(a)(8).

As a part of regulations that drive the property-wide cleanup activities described above, the Project would be required to implement SCA HAZ-2, Hazardous Building Materials and Site Contamination, which obligates the Project Applicant to submit the Phase I and II environmental site assessments to ACDEH for approval (already completed; see the Phase I and Phase II assessments, Apex 2021). Once approved, SCA HAZ-2 requires the Project Applicant to submit to the City evidence of approval by the ACDEH for any proposed remedial action (PCB Cleanup Plan (completed on October 25, 2022; Apex 2022); Corrective Action Plan and Corrective Action Implementation Plan to be submitted), including potential site mitigation and contingency plan (SMPs) and vapor intrusion mitigation systems (to be prepared), and required clearances by the applicable local, state, or federal regulatory agency. As such, compliance with SCA HAZ-2 would ensure that the recommendations of the Phase I and II environmental site assessments and requirements for remediation by the lead environmental regulatory agencies (i.e., ACDEH LOP and USEPA) are implemented. SCA HAZ-2 would also ensure that hazardous materials are encapsulated onsite or removed from the site in a secure and safe manner to ensure environmental and health issues are resolved pursuant to applicable laws and policies, subject to applicable regulatory agency oversight.

The Project would involve the demolition and removal of existing structures on the Project site. As previously discussed, given that the buildings predate the 1970s bans on the use of asbestos-containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyls (PCBs) in building materials, hazardous building materials are present in the structures.

Numerous existing regulations require that demolition and construction activities that may disturb or require the removal of hazardous building materials must be inspected and/or tested for the presence of hazardous materials, which has been completed. Hazardous building materials must be managed and disposed of in accordance with applicable laws and regulations. The Project would also be subject to SCA AIR-7, Asbestos in Structures, and SCA HAZ-1, Hazardous Materials Related to Construction, pertaining to the removal of ACM from structures and implementation of best management practices for hazardous materials during construction, respectively.

The Project site property is listed on the Cortese List (i.e., Government Code Section 65962.5 5) due to the release of hazardous materials. With completion of the cleanup activities summarized above, the property will remain on the Cortese List due to the encapsulation of PCBs, petroleum hydrocarbons, and select metals (e.g., lead and arsenic) in soil and installation of a vapor intrusion mitigation system, if necessary and required by ACDEH LOP. The encapsulation will eliminate the direct contact human health exposure and soil to groundwater leaching pathways. If necessary, a vapor intrusion mitigation system would protect future site users from exposure to petroleum hydrocarbon and VOC-impacted soil vapor. The land use covenant or deed restriction will ensure that the encapsulated materials are not disturbed and remain isolated from people and the environment.

As discussed above, the development of the Project would be subject to ACDEH LOP, ACDEH CUPA, USEPA, DTSC, and SCA regulatory requirements pertaining to the transportation, use, handling, and disposal of hazardous materials, which would address the potential for creation of

hazardous conditions due to the routine use or accidental release of hazardous materials, resulting in impacts that would be less than significant.

### Construction

After the demolition of existing structures and the cleanup and encapsulation of hazardous materials, the Project Applicant would construct the new warehouse and offices. During the construction phase, construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. The routine use or an accidental spill of hazardous materials used in construction could result in inadvertent releases, which could adversely affect construction workers, the public, and the environment.

Construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for a release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies, including San Francisco Bay. Contractors would be required to prepare and implement Hazardous Materials Business Plans (HMBPs) that would require that hazardous materials used for construction would be used properly and stored in appropriate containers with secondary containment, as needed, to contain a potential release. The California Fire Code would also require measures for the safe storage and handling of hazardous materials. The Project Applicant would be required to implement SCA HAZ-1, Hazardous Materials Related to Construction, to ensure best management practices are followed during construction activities including those related to the use, storage, and disposal of chemical products used in construction.

As discussed in Section 4.7.5, *Geology, Soils, and Paleontological Resources*, and Section 4.7.6, *Hydrology and Water Quality*, construction contractors would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) for construction activities according to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit requirements in compliance with SCA HYD-1, State Construction General Permit. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; describe protocols for responding immediately to spills; and describe Best Management Practices (BMPs) for controlling site run-on and runoff.

In addition, the transportation of hazardous materials would be regulated by the U.S. Department of Transportation (USDOT), the California Department of Transportation (Caltrans), and the California Highway Patrol (CHP). Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of an accidental release.

Finally, in the event of a spill that releases hazardous materials at the Project site, a coordinated response would occur at the federal, state, and local levels, including the City of Oakland. The Oakland Fire Department is the local hazardous materials response team. In the event of a

hazardous materials spill, the Oakland Police and Fire departments would be simultaneously notified and sent to the scene to respond and assess the situation.

Since development of the Project would be subject to the SCAs pertaining to the handling of hazardous materials related to construction activities and the remedial actions required when site contamination is encountered, and required compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials, this impact would be less than significant.

### Operations

The Project Applicant is proposing to construct an approximately 430,000 square foot, 56-foot-tall industrial building proposed for use as a distribution warehouse with office spaces. Once constructed, the warehouse space and offices would use and store small quantities of chemicals typical in an office and warehouse storage setting, such as office cleaning solutions, paints and thinners, and motor fuel (e.g., vehicles and fork lifts). Few of the chemicals would be considered hazardous materials (e.g., bleach) and the anticipated volumes would be small (i.e., less than 5 gallons). The warehouse operations may store and transport hazardous materials as products for distribution. However, products that contain hazardous materials would be contained within packaging designed to prevent leakage during storage and transportation. At a minimum, the land uses may involve the use of hazardous materials and waste such as solvents or oil-based paints. SCA HAZ-3, Hazardous Materials Business Plan, would ensure that employees are adequately trained to handle hazardous materials in accordance with all applicable local, state, and federal requirements. Therefore, with implementation of SCA HAZ-1, HAZ-2, and HAZ-3, the potential impacts associated with emitting and handling hazardous substance within 0.25-mile of schools, hospitals, and daycare facilities would be appropriately managed, and the impact would be less than significant.

**SCA HAZ-1: Hazardous Materials Related to Construction.**

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.**

**SCA HAZ-3: Hazardous Materials Business Plan.**

**SCA AIR-7: Asbestos in Structures.** See Section 4.1.3.

**SCA HYD-1: State Construction General Permit.** See Section 4.7.6.2.

**Mitigation:** None required.

---

**Impact HAZ-2: The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, hospital, or daycare center resulting in a significant impact (Criteria 3 and 4) (*Less than Significant with SCAs*)**

### Demolition and Construction

There are two medical facilities, ten daycare facilities, and no schools within 0.25-mile of the Project site, although the Ascend Elementary School is approximately 0.3 mile northeast of the Project site. As previously discussed under Impact HAZ-1, demolition and construction activities would involve the handling and transportation hazardous materials, substances, and waste. The remediation and transportation of hazardous materials would be regulated by the USEPA, DTSC, ACDEH, USDOT, Caltrans, and the CHP, along with City of Oakland SCAs. Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of an accidental release. The SCAs specific to hazardous materials, described in Impact HAZ-1, are relevant here. Implementation of SCA HAZ-1, SCA HAZ-2, and SCA AIR-7 would ensure best management practices are followed during demolition and construction activities pertaining to any potentially contaminated materials, and the impact would be less than significant.

### Operations

Once constructed, the warehouse space and offices would use and store small quantities of chemicals typical in an office and warehouse storage setting, such as office cleaning solutions, paints and thinners, and motor fuel (e.g., vehicles and fork lifts). Few of the chemicals would be considered hazardous materials (e.g., bleach) and the anticipated volumes would be small, generally less than 5 gallons. The warehouse operations may store and transport hazardous materials as products for distribution. However, products that contain hazardous materials would be contained within packaging designed to prevent leakage during storage and transportation. At a minimum, the land uses may involve the use of hazardous materials and waste such as cleaning solvents or oil-based paints. SCA HAZ-3, Hazardous Materials Business Plan, would ensure that employees are adequately trained to handle hazardous materials in accordance with all applicable local, state, and federal requirements. Therefore, with implementation to SCA HAZ-1, HAZ-2, and HAZ-3, the potential impacts associated with emitting and handling hazardous substance within 0.25-mile of schools, hospitals, and daycare facilities would be appropriately managed, and the impact would be less than significant.

**SCA HAZ-1: Hazardous Materials Related to Construction.**

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.**

**SCA HAZ-3: Hazardous Materials Business Plan.**

**SCA AIR-7: Asbestos in Structures.** See Section 4.1.3.

**Mitigation:** None required.

**Impact HAZ-3: The Project would provide adequate emergency access and would not fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Criteria 6 and 9) (*Less than Significant with SCAs*)**

### Demolition and Construction

Nearby designated Emergency Evacuation Routes include the north-south Fruitvale Avenue along the west side of the Project site and east-west San Leandro Street about three blocks north of the Project site. Most construction activities would occur within the Project site and would not affect roadways. However, construction may result in temporary road and lane closures as equipment, materials, and workers enter and exit the Project site. The temporary increases in construction traffic and potential temporary closures of nearby roads could interfere with emergency services traffic in the Project vicinity.

The construction phase of the Project would require a traffic control plan to ensure at least two emergency access routes are available for streets exceeding 600 feet in length, per the City of Oakland's Ordinances and General Plan Policies. Construction equipment and materials would enter and exit the Project site through existing access roads. During demolition and construction activities, primary access would be from Alameda Avenue and Fruitvale Avenue, along the south and west sides of the site, respectively. The access from Fruitvale Avenue along the western side of the site has two lanes in this location and thus access would not require the closure or restriction of lanes on Fruitvale Avenue. Alameda Avenue has one lane in both directions but does have parking along the north side that could be used to assist in accessing the site. In any case, the Project Applicant would be required to implement of SCA TRANS-1, Construction Activity in the Public Right-of-Way, which would require that the Project Applicant obtain an obstruction permit prior to any temporary construction-related obstructions in the public right-of-way and prepare and submit a traffic control plan prior to construction. The traffic control plan would describe measures to control construction traffic such that emergency vehicles will continue to be able to use Fruitvale and Alameda Avenues. With implementation of the required traffic control plan and compliance with SCA TRANS-1, the impact would be less than significant.

### Operations

As discussed in Section 3.3.4, *Access, Parking, and Circulation*, the Project would shift Alameda Avenue approximately 100 feet inland to increase public access to the shoreline and Bay Trail, and extend 37th Avenue, which is currently a cul-de-sac, through to Alameda Avenue, providing a new north-south connection. With the added connections, traffic flow and emergency access would be improved.

### Summary

The Project would be designed to comply with the most up-to-date building and fire codes and include fire safety measures and equipment, including the provision of adequate emergency access to the Project site for emergency vehicles and personnel. Project plans would be subject to review and approval by the Oakland Fire Department. Therefore, with implementation of SCA TRANS-1 the Project would provide adequate emergency access and would not fundamentally

impair implementation of or physically interfere with an adopted emergency response or evacuation plan and the impact would be less than significant.

**SCA TRANS-1: Construction Activity in the Public Right-of-Way.** See Section 4.6.2.

**Mitigation:** None required.

---

**Impact HAZ-4: The Project would not be located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport, public use airport, or private airstrip, and would not result in a significant safety hazard for people residing or working in the Project area. (Criteria 6 and 9) (*Less than Significant*)**

### Demolition and Construction

The Project site is approximately 2.0 miles northwest of the Oakland International Airport. While the Project site is in proximity to the Oakland International Airport, it is not within the Airport Influence Area, the Safety Compatibility Zone, or the Noise Compatibility Zone, as delineated in the ALUCP. As the Project site is not within the Airport Influence Area, the Safety Compatibility Zone, or the Noise Compatibility Zone, demolition and construction associated with the Project would not result in a safety hazard for people residing or working in the Project area. The impact would be less than significant.

### Operations

As discussed above, the Project site is within 2.0 miles of the Oakland International Airport; however, the Project site is not located within any of the safety zones delineated in the ALCUP. Project operations would not result in a safety hazard to people residing or working in the area. The Project's operational impact would be less than significant.

---

## 4.4.5 Cumulative Impacts

As analyzed above, the Project would result in no impact with regard to the following criteria: being located within an airport land use plan or being within two miles of a public airport; and significant risk of loss, injury, or death involving wildland fire. Because no impact would result, the Project could not cause or contribute to any cumulative effect in these regards. Therefore, this cumulative analysis focuses on the Project's less-than-significant impacts relating to routine transport, use, or disposal of hazardous materials; accidental release of hazardous materials into the environment, handling hazardous materials near sensitive receptors (e.g., within one-quarter mile of a sensitive receptor), and emergency access and response.

This section presents an analysis of the cumulative effects of the Project in combination with other past, present, and reasonably foreseeable future projects that could cause cumulatively considerable impacts. The geographic area affected by the Project and its potential to contribute to cumulative impacts varies based on the environmental resource under consideration. Hazards and hazardous materials are generally site-specific and depend on the nature and extent of the hazardous

materials release, and existing and future soil and groundwater conditions. For example, hazardous materials incidents tend to be limited to a smaller more localized area surrounding the immediate spill location and extent of the release, and could only be cumulative if two or more hazardous materials releases spatially overlapped. The geographic scope of analysis for cumulative hazards and hazardous materials impacts encompasses and is limited to the Project site and its immediately adjacent area.

The timeframe during which the Project could contribute to cumulative hazards and hazardous materials effects includes the construction and operations phases. For the Project, the operations phase is assumed to be permanent. Impacts relative to hazardous materials are generally location- and time-specific. Hazardous materials events could only be cumulative if two or more hazardous materials releases occurred at the same time, as well as overlapping at the same location.

**Impact HAZ-1.CU: The Project, combined with cumulative development in the Project vicinity, would not result in significant cumulative impacts relative to hazards and hazardous materials. (*Less than Significant with SCAs)***

### Cumulative Impacts during Project Construction

Significant cumulative impacts related to hazards and hazardous materials could occur if the incremental impacts of the Project combined with the incremental impacts of one or more cumulative projects to create a substantially increased risk that people or the environment would be exposed to hazardous materials used.

Cumulative projects would be subject to the same regulatory requirements discussed above for the Project, including the implementation of health and safety plans and soil management plans, as needed. Therefore, cumulative projects involving releases of or encountering hazardous materials also would be required to remediate their respective sites to the same established regulatory standards. This would be the case regardless of the number, frequency, or size of the release(s), or the residual amount of chemicals present in the soil from previous spills. While it is possible that the Project and cumulative projects could result in releases of hazardous materials at the same time and in overlapping locations, the responsible party associated with each spill would be required to remediate site conditions to the same established regulatory standards. The residual less-than-significant effects of the Project (with SCAs) that would remain after remediation would not combine with the potential residual effects of cumulative projects to cause a potential significant cumulative impact because residual impacts would be highly site-specific. Accordingly, no significant cumulative impact with respect to the use or release of hazardous materials would result. For the above reasons, the combined effects of the construction of the Project in combination with cumulative projects would not have a cumulatively considerable contribution to a cumulative impact. In addition, both the Project and cumulative projects would be required to provide appropriate traffic control and emergency access for their projects during construction and would be required to implement the applicable City's SCAs pertaining to hazards and hazardous materials. Therefore, no significant cumulative impact related to hazards and hazardous materials is identified for Project construction.

### Cumulative Impacts during Project Operation

Significant cumulative impacts related to operational hazards could occur if the incremental impacts of the Project combined with those of one or more other projects were to cause a substantial increase in risk that people or the environment would be exposed to hazardous materials used or encountered during the operations phase.

Similar to hazardous materials during construction, compliance with the laws and regulations regarding the safe transport, use, storage, and disposal of hazardous materials would reduce the Project-specific incremental impact to a less-than-significant level (with SCAs). The cumulative project components involving the handling, storage, and disposal of hazardous materials would also be required to prepare and implement HMBPs and comply with the same applicable laws and regulations, including those governing containment, site layout, and emergency response and notification procedures in the event of a spill or release. Transportation and disposal of wastes, such as spent cleaning solutions, would also be subject to regulations for the safe handling, transportation, and disposal of chemicals and wastes. As noted previously, such regulations include standards to which parties responsible for hazardous materials releases must return spill sites, regardless of location, frequency, or size of release, or existing background contaminant concentrations, to their original conditions. Therefore, compliance with existing laws and regulations and the City's SCAs regarding hazardous materials would reduce the risk of environmental or human exposure to such materials. For the above reasons, the combined effects of the Project and cumulative projects would not have a cumulatively considerable contribution to a cumulative impact. No significant cumulative impact is identified.

### Summary

Site review for individual building projects and existing emergency response requirements are sufficient to ensure that a project's potential impairment of or effect on implementation of any emergency response or evacuation plans would be considered a less-than-significant impact (with SCAs). However, cumulative development in the surrounding area could increase the number of people and structures that could interfere with emergency evacuation or emergency response plans. Similar to the Project, cumulative development would be designed to comply with the most up-to-date building and fire codes and include fire safety measures and equipment, including the provision of adequate emergency access to the Project site for emergency vehicles and personnel. Cumulative development project plans would be subject to review and approval by the Oakland Fire Department. Therefore, with implementation of SCA TRANS-1, the Project and cumulative projects would not fundamentally impair implementation of or physically interfere with an adopted emergency response or evacuation plan and the impact would be less than significant. In addition, all cumulative projects would be required to comply with the same regulations and City SCAs. Therefore, the effects of the Project would not combine with cumulative development in the surrounding area to become cumulatively considerable.

**SCA HAZ-1: Hazardous Materials Related to Construction.**

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.**

**SCA HAZ-3: Hazardous Materials Business Plan.**

**SCA AIR-7: Asbestos in Structures.** See Section 4.1.3.

**SCA HYD-1: State Construction General Permit.** See Section 4.7.6.2.

**SCA TRANS-1: Construction Activity in the Public Right-of-Way.** See Section 4.6.2.

**Mitigation:** None required.

---

## 4.4.6 References

AECOM. 2017. *Regulated Building Materials Abatement Project Manual*. May 4.

Alameda County. 2010. *Airport Land Use Compatibility Plan, Oakland International Airport*. December 15.

Apex. 2021. *Phase II Environmental Site Assessment, Former Owens-Brockway Glass Facility, 3600 Alameda Avenue, Oakland, California*. October 21.

Apex. 2023. *Preliminary Vapor Intrusion Conceptual Site Model, 3600 Alameda Redevelopment, 3600 Alameda Avenue, Oakland, California*. March 7.

California Department of Forestry and Fire Protection (CAL FIRE). 2007. *Fire Hazard Severity Zones in SRA, Adopted by CAL FIRE on November 7, 2008*.

CAL FIRE. 2008. *Oakland Very High Fire Hazard Severity Zones in LRA as Recommended by CAL FIRE*. September 3.

City of Oakland. 2012. *Safety Element of the General Plan*. Adopted March 20, 2012.

CKG. 2020. *Revised Updated Facility Closure Plan, Owens-Brockway Glass Container Inc. Facility, 3600 Alameda Avenue, Oakland, California*. May 7.

CKG. 2021. *Application for Cleanup of Polychlorinated Biphenyls Owens-Brockway Glass Container Inc., 3600 Alameda Avenue, Oakland, California*. October 22.

Kleinfelder. 2021. *Geotechnical Investigation Report, Industrial Warehouse Site; 3600 Alameda Avenue, Oakland, California.* Project No. 20214267.001A. May 26, 2021. Accessed January 20, 2022.

# 4.5 Noise and Vibration

## 4.5.1 Introduction

This section assesses the potential for the Project to result in significant adverse impacts related to noise and vibration. The section first includes a description of the existing environmental setting as it relates to noise levels in the Project vicinity and provides a regulatory framework that discusses applicable state and local regulations. The section then includes an evaluation of potential impacts of the Project related to noise and vibration.

The information and analysis in this section is based on a review of the Project; applicable local policies, regulations and standards in the general plans and noise ordinances of the cities of Oakland and Alameda; and guidance on performing noise and vibration analyses from the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).

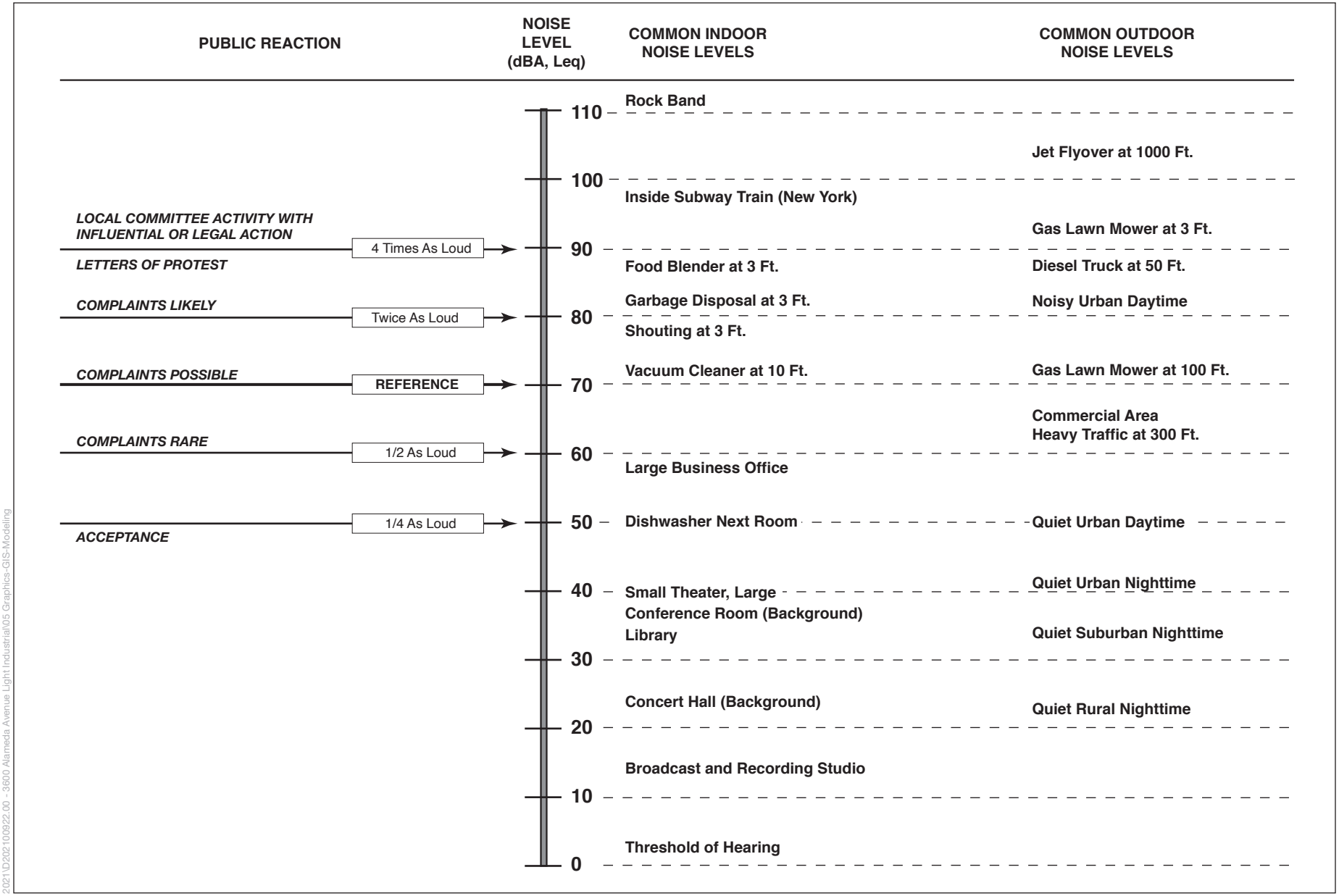
## 4.5.2 Environmental Setting

### Noise Principles and Descriptors

Noise is generally defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. Pressure waves traveling through air exert a force registered by the human ear as sound.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. When all the audible frequencies of a sound are measured, a sound spectrum is plotted consisting of a range of frequency spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements. Some representative noise sources and their corresponding A-weighted noise levels are shown on **Figure 4.5-1**. All noise levels presented in this report are A-weighted unless otherwise stated.




2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: ESA, 2022

3600 Alameda Industrial Project

**Figure 4.5-1**
Effects of Noise on People

ESA

## Noise Exposure and Community Noise

An individual's noise exposure is a measure of noise over a period of time. A noise level is a measure of noise at a given instant in time. The noise levels presented on Figure 4.5-1 are representative of measured noise at a given instant in time; however, they rarely persist consistently over a long period of time. Rather, community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.

These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The following are the most frequently used noise descriptors:

- **$L_{eq}$:** The equivalent-continuous sound level, used to describe noise over a specified period of time in terms of a single numerical value. The $L_{eq}$ of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. May also be referred to as the "average sound level."
- **$L_{max}$:** The maximum, instantaneous noise level experienced during a given period of time.
- **$L_{min}$:** The minimum, instantaneous noise level experienced during a given period of time.
- **$L_{dn}$:** The average A-weighted noise level during a 24-hour day, obtained after 10 dB are added to noise levels measured between 10 p.m. and 7 a.m. to account for nighttime noise sensitivity. Also referred to as the "day-night average noise level" (DNL).
- **CNEL:** The community noise equivalent level. This is the average A-weighted noise level during a 24-hour day that is obtained after 5 dB are added to measured noise levels between 7 p.m. and 10 p.m. and 10 dB are added to noise levels between 10 p.m. and 7 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The CNEL is the metric generally used for assessment of aircraft noise. The result is normally about 0.5 dBA higher than DNL using the same 24-hour data (Caltrans, 2013).

## Effects of Noise on People

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance).
- Interference effects (e.g., communication, sleep, and learning interference).

- Physiological effects (e.g., startle response).
- Physical effects (e.g., hearing loss).

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects of environmental noise refer to those effects that interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

Overall, there is no completely satisfactory way to measure the subjective effects of noise, nor the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur (Caltrans, 2013):

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived.
- Outside of the laboratory, a 3 dB change in noise levels is considered to be a barely perceivable difference.
- A change in noise levels of 5 dB is considered to be a readily perceivable difference.
- A change in noise levels of 10 dB is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Since the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dB, the combined sound level would be 53 dB, not 100 dB.

## Fundamentals of Vibration

As described in the FTA's Transit Noise and Vibration Impact Assessment (FTA 2018), groundborne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. In contrast to airborne noise, groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major

roads. Some common sources of groundborne vibration are trains; buses on rough roads; and construction activities such as blasting, pile-driving, and operation of heavy earth-moving equipment.

Several different methods are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe the impacts of vibration on buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (in vibration decibels [VdB]) is commonly used to measure RMS.

The relationship of PPV to RMS velocity is expressed in terms of the "crest factor," defined as the ratio of the PPV amplitude to the RMS amplitude. Peak particle velocity is typically a factor of 1.7 to 6 times greater than RMS vibration velocity (FTA, 2018). The decibel notation acts to compress the range of numbers required to describe vibration.

Typically, groundborne vibration generated by human activity attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.

The effects of groundborne vibration include movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, vibration can damage buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile driving during construction. Annoyance from vibration often occurs when the vibration levels exceed the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings. FTA's measure of the threshold of architectural damage for conventional sensitive structures is 0.2 inches per second (in/sec) PPV (FTA, 2018).

In residential areas, the background vibration velocity level is usually around 50 VdB (approximately 0.0013 in/sec PPV, with a crest factor of 4). This level is well below the vibration-velocity-level threshold of perception for humans, which is approximately 65 VdB. A vibration velocity level of 75 VdB is considered to be the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (FTA, 2018).

## Noise Sources and Levels

Transportation sources, such as automobiles, trucks, trains, and aircraft, are the principal sources of noise in the urban environment. Along major transportation corridors, noise levels can reach 80 DNL, while along arterial streets, noise levels typically range from 65 to 70 DNL. However, noise levels on roadways, like all areas, can be affected by intervening development, topography, or landscaping. Industrial and commercial equipment and operations also contribute to the ambient noise environment in their vicinities. Primary noise sources in the Project site vicinity include traffic and commercial/industrial activities. At its closest, the Project site is approximately 330 feet south of Interstate 880 (I-880). Observations during a site reconnaissance indicated that

local traffic noise is prominent and traffic along I-880 corridor is only audible during the quietest periods due to the presence of intervening structures and the distance.

To characterize the noise environment within the Project site and surrounding area, one long-term (24-hour) and two short-term (15-minute) noise measurements were conducted, and resulting data are presented in Appendix H. Long-term noise monitoring was conducted on 36th Avenue, approximately 200 feet from E 8th Street and 140 feet from the Project site's northern boundary. This location was selected based on its proximity to Project construction activities, while short-term noise monitoring was conducted at two off-site locations near sensitive land uses and primary roadways that would be used to access the Project site. **Figure 4.5-2** shows the noise measurement locations. **Table 4.5-1** presents a summary of the noise data collected during the noise monitoring effort. The table also summarizes the major noise sources observed to contribute to the ambient noise levels at the measurement locations.

Noise measurements were conducted using SoundTrack LxT® sound level meters. The meters were laboratory certified within the past year and were calibrated prior to each measurement using a laboratory certified calibrator. For short-term measurements, the sound level meter was placed on a tripod at an approximate microphone height of 5 feet. The long-term measurements necessitated a higher microphone height of approximately 8 feet to ensure equipment safety.

**TABLE 4.5-1**
**NOISE MEASUREMENT DATA COLLECTED IN THE VICINITY OF THE PROJECT SITE**

| Measurement Type/Location | Observed Noise Sources | Noise Levels in dBA | | |
|---|---|---|---|---|
| | | Day-Night Level (DNL) | Daytime Hourly Average $L_{eq}$ | Nighttime Hourly Average $L_{eq}$ |
| **Long-term (24-hour) Measurement** | | | | |
| LT-1: 36th Avenue 200 feet from E 8th Street and 140 feet from Project site | Traffic on adjacent roadways, wind | 72 | 67 | 65 |
| **Short-term (15-minute) Measurements** | | | | |
| ST-1: 37th Avenue. 60 feet from E 8th Street. and150 feet from Interstate 880 | Traffic on I-880 and adjacent roadways | -- | 68.3 | |
| ST-2: Adjacent to Fruitvale Railroad Bridge120 feet from Marina Drive | Traffic | -- | 59.1 | |

SOURCE: Data collected by ESA in 2022.




SOURCE: ESA, 2022; Google Earth, 2022

3600 Alameda Industrial Project

**Figure 4.5-2**
Noise Monitoring Locations

ESA

## Vibration

The only sources of groundborne vibration at and in the vicinity of the Project site are heavy-duty vehicular travel (e.g., refuse trucks, haul trucks) on local roadways and loading/unloading activities at the loading docks of The Home Depot to the east of the Project site. These sources of vibration are minor and vibration levels associated with them would not be perceptible to any sensitive receptors. Trucks traveling at a distance of 50 feet typically generate groundborne vibration velocity levels of approximately 0.006 in/sec PPV, and these levels could reach approximately 0.016 in/sec PPV where trucks pass over discontinuities in the roadway (FTA, 2018).

## Sensitive Receptors

Some land uses are considered more sensitive to noise than others due to the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, motels and hotels, schools, libraries, churches, hospitals, nursing homes, and auditoriums generally are more sensitive to noise than are commercial and industrial land uses. Sensitive receptors in the Project vicinity primarily include residential uses. The nearest residences are located to the north of the Project site along Elmwood Avenue and 36th Avenue less than 100 feet from the Project site boundary. Residential uses are also located to the northwest across Fruitvale Boulevard and approximately 500 feet to the south across the Tidal Canal in the City of Alameda. The area to the east and southeast of the Project site, through which Project trucks would travel to access the freeway is primarily commercial and industrial. There are no schools or daycares in the immediate vicinity of the Project site. The Lazear Charter Academy is located approximately 1,400 feet to the northwest; Arise High School and Ascend Elementary School are located approximately 1,750 feet and 1,400 feet to the north, respectively. The nearest noise sensitive receptors are residences located along Elmwood Avenue, that would be located as close as 40 feet from construction activities associated with offsite improvements to the north of the Project site. The nearest off-site structures that could experience building damage impacts from construction vibration are ancillary structures located as close as 10 feet from construction activities associated with off-site improvements.

# 4.5.3 Regulatory Setting

## Federal

### *Federal Noise Standards*

In 1972, the Noise Control Act (42 United States Code section 4901 et seq.) was passed by congress to promote limited noise environments in support of public health and welfare. It also established the U.S. Environmental Protection Agency (U.S. EPA) Office of Noise Abatement and Control to coordinate federal noise control activities. The U.S. EPA established guidelines for noise levels that would be considered safe for community exposure without the risk of adverse health or welfare effects. The U.S. EPA found that to prevent hearing loss over the lifetime of a receptor, the yearly average $L_{eq}$ should not exceed 70 dBA, and the DNL should not exceed 55 dBA in outdoor activity areas or 45 dBA indoors to prevent interference and annoyance (U.S. EPA, 1974). In 1982, noise control was largely passed to state and local governments.

Federal regulations establish noise limits for medium and heavy trucks (more than 4.5 tons, gross vehicle weight rating) under Title 40 of the Code of Federal Regulations (CFR), Part 205, Subpart B. The federal truck passby noise standard is 80 dBA at 50 feet from the vehicle pathway centerline, under specified test procedures. These requirements are implemented through regulatory controls on truck manufacturers. There are no comparable standards for vibration, which tend to be specific to the roadway surface, the vehicle load, and other factors.

The primary federal noise standards that directly regulate noise related to the operation of the Project are with regard to noise exposure and workers. The U.S. Occupational Safety and Health Administration (OSHA) enforces regulations to safeguard the hearing of workers exposed to occupational noise. OSHA has established worker noise exposure limits that vary with the duration of the exposure and requires implementation of a hearing conservation program if employees are exposed to noise levels in excess of 85 dBA.

### *Federal Transit Administration Vibration Standards*

The FTA has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. The vibration damage criteria adopted by FTA are shown in **Table 4.5-2**.

**TABLE 4.5-2**
**CONSTRUCTION VIBRATION DAMAGE CRITERIA**

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

NOTES: in/sec = inches per second; PPV = peak particle velocity

SOURCE: FTA, 2018.

In addition, FTA has adopted standards related to human annoyance for groundborne vibration impacts for the following three land use categories: Vibration Category 1, High Sensitivity; Vibration Category 2, Residential; and Vibration Category 3, Institutional. FTA defines these categories as follows:

- *Category 1:* Buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes.
- *Category 2:* All residential land uses and any buildings where people sleep, such as hotels and hospitals.

- *Category 3:* Institutional land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference.

Under conditions where there is an infrequent number of events per day, FTA has established thresholds of 65 VdB for Category 1 buildings, 80 VdB for Category 2 buildings, and 83 VdB for Category 3 buildings.[1] Under conditions where there is an occasional number of events per day, FTA has established thresholds of 65 VdB for Category 1 buildings, 75 VdB for Category 2 buildings, and 78 VdB for Category 3 buildings.[2] No thresholds have been adopted or recommended for commercial and office uses.

## State

### *California Department of Public Health Noise Standards*

The California Department of Public Health has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. These guidelines for land use and noise exposure compatibility are shown in **Table 4.5-3**. In addition, Section 65302(f) of the California Government Code requires each county and city in the state to prepare and adopt a comprehensive long-range general plan for its physical development, with Section 65302(g) requiring a noise element to be included in the general plan. The noise element must: (1) identify and appraise noise problems in the community; (2) recognize Office of Noise Control guidelines; and (3) analyze and quantify current and projected noise levels.

The state of California also establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the state pass-by standard is consistent with the federal limit of 80 dB. The state pass-by standard for light trucks and passenger cars (less than 4.5 tons, gross vehicle rating) is also 80 dB at 15 meters (50 feet) from the centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by state and local law enforcement officials.

### *State Vibration Standards*

No state vibration standards are applicable to the Project. Moreover, according to the California Department of Transportation's (Caltrans's) *Transportation and Construction Vibration Guidance Manual (*Caltrans, 2020), there are no official Caltrans standards for vibration. However, this manual provides guidelines for assessing the potential for vibration damage to various types of buildings, ranging from 0.08 to 0.12 in/sec PPV for extremely fragile historic buildings, ruins, and ancient monuments to 0.50 to 2.0 in/sec PPV for modern industrial/commercial buildings.

[1] FTA defines "infrequent events" as fewer than 30 vibration events of the same kind per day.

[2] FTA defines "occasional events" as between 30 and 70 vibration events of the same source per day.

**TABLE 4.5-3**
**COMMUNITY NOISE EXPOSURE (DNL OR CNEL)**

| Land Use | Normally Acceptable[a] | Conditionally Acceptable[b] | Normally Unacceptable[c] | Clearly Unacceptable[d] |
|---|---|---|---|---|
| Single-Family Homes, Duplexes, Mobile Homes | 50–60 | 55–70 | 70–75 | above 75 |
| Multifamily Homes | 50–65 | 60–70 | 70–75 | above 75 |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | 50–70 | 60–70 | 70–80 | above 80 |
| Transient Lodging—Motels, Hotels | 50–65 | 60–70 | 70–80 | above 75 |
| Auditoriums, Concert Halls, Amphitheaters | — | 50–70 | — | above 70 |
| Sports Arenas, Outdoor Spectator Sports | — | 50–75 | — | above 75 |
| Playgrounds, Neighborhood Parks | 50–70 | — | 67–75 | above 75 |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | 50–75 | — | 70–80 | above 80 |
| Office Buildings, Business and Professional, Commercial | 50–70 | 67–77 | above 75 | — |
| Industrial, Manufacturing, Utilities, Agriculture | 50–75 | 70–80 | above 75 | — |

NOTES: CNEL = community noise equivalent level; DNL = day-night average noise level

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.

[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

SOURCE: Governor's Office of Planning and Research, *State of California General Plan Guidelines – Noise Element Guidelines*, 2017.

# Local

## *City of Oakland*

### General Plan Noise Element

The Oakland General Plan Noise Element contains guidelines for determining the compatibility of various land uses with different outdoor noise environments (City of Oakland 2005). The Noise Element recognizes that some land uses are more sensitive to ambient noise levels than others, due to the amount of noise exposure (in terms of both the exposure duration and insulation from noise) and the types of typical activities. The City of Oakland uses state noise guidelines for evaluating the compatibility between various land uses and their noise environments, which are summarized in **Table 4.5-4**.

In this context, "normally acceptable" is defined as satisfactory for the specific land use, assuming that normal, conventional construction is used in buildings. "Conditionally acceptable" means that new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh-air supply systems or air

conditioning, will normally suffice. "Normally unacceptable" means that new construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

**TABLE 4.5-4**
**LAND USE NOISE COMPATIBILITY GUIDELINES – CITY OF OAKLAND**

| LAND USE CATEGORY | COMMUNITY NOISE EXPOSURE ($L_{DN}$ OR CNEL, dB) | | | | | |
|---|---|---|---|---|---|---|
| | 55 | 60 | 65 | 70 | 75 | 80 |
| Residential | NA | NA | CA | NU | CU | CU |
| Transient lodging – motels, hotels | NA | NA | NA | CA | NU | CU |
| Schools, libraries, churches, hospitals, nursing homes | NA | NA | CA | NU | NU | CU |
| Auditoriums, concert halls, amphitheaters | CA | CA | CA | CA | CU | CU |
| Sports arenas, outdoor spectator sports | CA | CA | CA | CA | CU | CU |
| Playgrounds, neighborhood parks | NA | NA | NA | NU | CU | CU |
| Golf courses, riding stables, water recreation, cemeteries | NA | NA | NA | NA | NU | CU |
| Office buildings, business commercial and professional | NA | NA | CA | CA | NU | NU |
| Industrial, manufacturing, utilities, agriculture | NA | NA | NA | CA | CA | NU |

| | |
|---|---|
| NA | NORMALLY ACCEPTABLE: Development may occur without an analysis of potential noise impacts *to the proposed development* (though it might still be necessary to analyze noise impacts that the project might have *on its surroundings*). |
| CA | CONDITIONALLY ACCEPTABLE: Development should be undertaken only after an analysis of noise-reduction requirements is conducted and if necessary noise-mitigating features are included. |
| NU | NORMALLY UNACCEPTABLE: Development should generally be discouraged; it may be undertaken only if a detailed analysis of the noise-reduction requirements is conducted, and if highly effective noise mitigation features are included. |
| CU | CLEARLY UNACCEPTABLE: Development should not be undertaken. |

SOURCE: Reproduced Figure 1 of the City of Oakland CEQA Thresholds/Criteria of Significance Guidelines, 2016, consistent with Figure 6 from the Oakland General Plan Noise Element 2005.

The Oakland Noise Element identifies maximum interior noise levels generally considered acceptable for various common land uses (with windows closed). The Noise Element includes two goals for the City:

- To protect Oakland's quality of life and the physical and mental well-being of residents and others in the City by reducing the community's exposure to noise.
- To safeguard Oakland's economic welfare by mitigating noise incompatibilities among commercial, industrial and residential land uses.
- The Noise Element also contains the following applicable policies and actions:

  ***Policy 1:*** Ensure the compatibility of existing and, especially, of proposed development projects not only with neighboring land uses but also with their surrounding noise environment.

  *Action 1.1:* Use the noise-land use compatibility matrix in conjunction with the noise contour maps (especially for roadway traffic) to evaluate the acceptability of residential and other proposed land uses and also the need for any mitigation or abatement measures to achieve the desired degree of acceptability.

  *Action 1.2:* Continue using the City's zoning regulations and permit processes to limit the hours of operation of noise-producing activities which create conflicts with residential uses and to attach noise-abatement requirements to such activities.

  ***Policy 2:*** Protect the noise environment by controlling the generation of noise by both stationary and mobile noise sources.

  *Action 2.1:* Review the various noise prohibitions and restrictions under the City's nuisance noise ordinance and revise the ordinance if necessary.

  *Action 2.2:* As resources permit, increase enforcement of noise-related complaints and also of vehicle speed limits and of operational noise from cars, trucks, and motorcycles.

  ***Policy 3:*** Reduce the community's exposure to noise by minimizing the noise levels that are received by Oakland residents and others in the city. (This policy addresses the reception of noise whereas Policy 2 addresses the generation of noise.)

  *Action 3.1:* Continue to use the building-permit application process to enforce the California Noise Insulation Standards regulating the maximum allowable interior noise level in new multi-unit buildings.

  *Action 3.2:* Review the City's noise performance standards and revise them as appropriate to be consistent with City Council policy.

### Oakland Municipal Code

The City of Oakland also regulates noise through enforcement of its noise ordinance, which can be found in Section 8.18.020 of the Health and Safety Code, Section 17.120 of the Planning Code, and Chapter 12.56 of the Municipal Code.

The noise ordinance within the Health and Safety Code qualitatively addresses persistent nuisance noise, which it defines as the persistent maintenance or emission of any noise or sound produced by human, animal, or mechanical means, between the hours of 9:00 p.m. and 7:00 a.m.

next ensuing, which, by reason of its raucous or nerve-racking nature, shall disturb the peace or comfort, or be injurious to the health of any person. In addition, the code states that failure to comply with the following requirements constitutes a nuisance:

A. All construction equipment powered by internal combustion engines shall be properly muffled and maintained.

B. Unnecessary idling of internal combustion engines is prohibited.

C. All stationery noise-generating construction equipment such as tree grinders and air compressors are to be located as far as is practical from existing residences.

D. Quiet construction equipment, particularly air compressors, are to be selected whenever possible.

E. Use of pile drivers and jack hammers shall be prohibited on Sundays and holidays, except for emergencies and as approved in advance by the Building Official.

The noise ordinance within the Planning Code regulates construction noise and only operational noise from stationary sources, as cities and counties do not have regulatory authority to establish noise level limits over noise from mobile on-road sources (transportation noise), which does not include on-site construction. Transportation noise is regulated at the state and federal level by noise limits placed on vehicle manufacturers. **Table 4.5-5** presents the maximum allowable receiving noise standards applicable to long-term exposure for residential and civic land uses, for noise from stationary noise sources (not transportation noise). Section 17.120.050 states that all activities shall be so operated that the noise level inherently and regularly generated by these activities across real property lines shall not exceed the applicable values indicated in Table 5, as modified where applicable by the adjustments indicated in footnote (a) of that table. Subsection F of Section 17.120.050 further indicates that noise measurement procedures shall be conducted at a position or positions at any point on the receiver's property.

Once a structure or facility is constructed, noise from a stationary source would be limited by the standards in Table 4.5-5 (for example, between 10:00 p.m. and 7:00 a.m., residential uses may only be exposed to noises up to 45 dBA for a period of cumulative 20-minutes in a 1-hour time period). The noise ordinance states that if the measured ambient noise level exceeds the applicable standard in any category, then the stated applicable noise level shall be adjusted so as to equal the ambient noise level. In other words, if existing noise is measured to be louder than the maximum allowed (i.e., the “applicable noise level standard”), the existing noise level shall be considered the maximum allowed.

**Table 4.5-6** presents noise level standards from the noise ordinance that apply to temporary exposure to short- and long-term construction noise. In this context, short-term refers to construction activities lasting less than 10 days at a time, while long-term refers to construction activities lasting greater than 10 days at a time. Given the Project’s 17-month construction schedule, the latter noise level standards would apply for daytime construction activities. Per Section 17.120.050 (G) of the Planning Code, the limits in Table 4.5-6 apply to residential and industrial/commercial land uses. In addition, active recreational areas are considered marginally sensitive to noise, with the standards for commercial and industrial land uses applied.

**TABLE 4.5-5**
**MAXIMUM ALLOWABLE RECEIVING NOISE STANDARDS FOR SPECIFIED LAND USES, dBA[a]**
**(FROM STATIONARY SOURCES)**

| Receiving Land Use | Cumulative Number of Minutes in 1-Hour Time Period[b] | Maximum Allowable Noise Level Standards (dBA) | |
|---|---|---|---|
| | | Daytime 7:00 a.m. to 10:00 p.m. | Nighttime 10:00 p.m. to 7:00 a.m. |
| Residential, School, Child Care, Health Care, or Nursing Home, and Public Open Space | 20 ($L_{33}$)<br>10 ($L_{16.7}$)<br>5 ($L_{8.3}$)<br>1 ($L_{1.7}$)<br>0 ($L_{max}$) | 60<br>65<br>70<br>75<br>80 | 45<br>50<br>55<br>60<br>65 |
| | | **Anytime** | |
| Commercial | 20 ($L_{33}$)<br>10 ($L_{16.7}$)<br>5 ($L_{8.3}$)<br>1 ($L_{1.7}$)<br>0 ($L_{max}$) | 65<br>70<br>75<br>80<br>85 | |
| | | **Anytime** | |
| Manufacturing, Mining, and Quarrying | 20 ($L_{33}$)<br>10 ($L_{16.7}$)<br>5 ($L_{8.3}$)<br>1 ($L_{1.7}$)<br>0 ($L_{max}$) | 70<br>75<br>80<br>85<br>90 | |

NOTES:

[a] These standards are to be further reduced by 5-dBA for simple tone noise, noise consisting primarily of speech or music, or recurring impact noise. If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.

[b] $L_x$ represents the noise level that is exceeded X percent of a given period. $L_{max}$ is the maximum instantaneous noise level.

SOURCE: Oakland Noise Ordinance No. 11895, 1996

**TABLE 4.5-6**
**MAXIMUM ALLOWABLE RECEIVING NOISE STANDARDS FOR TEMPORARY CONSTRUCTION OR DEMOLITION ACTIVITIES, dBA**

| Operation/Receiving Land Use | Daily (Weekday) 7:00 a.m. to 7:00 p.m. | Weekends 9:00 a.m. to 8:00 p.m. |
|---|---|---|
| **Short-Term Operation (less than 10-days)** | | |
| Residential | 80 | 65 |
| Commercial, Industrial | 85 | 70 |
| **Long-Term Operation (more than 10-days)** | | |
| Residential | 65 | 55 |
| Commercial, Industrial | 70 | 60 |

NOTES:

During the hours of 7:00 p.m. to 7:00 a.m. on weekdays and 8:00 p.m. to 9:00 a.m. on weekends and federal holidays, noise levels received by any land use from construction or demolition shall not exceed the applicable nighttime operational noise level standard (see Table 4.11-8). If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level. Maximum allowable receiving standards are applied in this analysis as the maximum $L_{eq}$.

SOURCE: Oakland Noise Ordinance No. 11895, 1996

For nighttime construction activities during the hours of 7:00 p.m. to 7:00 a.m. on weekdays and 8:00 p.m. to 9:00 a.m. on weekends and federal holidays, noise level limits received by any land use from construction or demolition are not addressed by standards in Table 4.5-6 but, rather, according to the City of Oakland Noise Ordinance, these nighttime construction noise levels shall not exceed the applicable nighttime operational noise level standards in Table 4.5-5, which for residential uses would be 45 dBA ($L_{33}$) (see Table 4.5-5). The ordinance further states that if the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.

## *City of Alameda*

The City of Alameda General Plan is the principal policy document for guiding future conservation and development within the City of Alameda. It represents the framework on which the City of Alameda must base decisions regarding growth, public services and facilities, and protection and enhancement of the community. The General Plan polices and Alameda Municipal Code provision (described below) are relevant here because the Project site is on the waterfront within close proximity to the City of Alameda and could potentially have noise impacts on sensitive receptors within the City's boundaries.

The General Plan establishes comprehensive, long-term land use policies for the City of Alameda. Consistent with state law, the General Plan includes the Land Use Element; City Design Element; Transportation Element; Open Space and Conservation Element; Parks and Recreation, Shoreline Access, Schools and Cultural Facilities Element; Safety and Noise Element; Housing Element; and specific elements/amendments relating to Alameda Point and the Northern Waterfront areas of the City of Alameda.

### General Plan Safety and Noise Element

A combined Safety and Noise element for the City of Alameda General Plan (City of Alameda, 2017) became effective on January 1, 2017. The element includes the following noise policies that would be applicable to the Project:

> ***Policy SN-51:*** Maintain day and nighttime truck routes that minimize the number of residents exposed to truck noise.
>
> ***Policy SN-55:*** To the extent feasible, through the development entitlement process, require local businesses to reduce noise impacts on the community by avoiding or replacing excessively noisy equipment and machinery, applying noise-reduction technology, and following operating procedures that limit the potential for conflicts.
>
> ***Policy SN-56:*** Require noise reduction strategies in all construction projects. Require a vibration impact assessment for proposed projects in which heavy-duty construction equipment would be used (e.g., pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, the City shall require all feasible mitigation measures to be implemented to ensure that no damage to structures will occur and disturbance to sensitive receptors would be minimized.
>
> ***Policy SN-57:*** In making a determination of impact under the California Environmental Quality Act (CEQA), consider the following impacts to be "significant" if the proposed project causes: an increase in the $L_{dn}$ noise exposure of 4 or more dBA if the resulting

noise level would exceed that described as normally acceptable for the affected land use, as indicated in **Table 4.5-7**, or any increase in $L_{dn}$ of 6 dBA or more.

**TABLE 4.5-7**
**ACCEPTABLE NOISE LEVELS IN ALAMEDA**

| LAND USE CATEGORY | COMMUNITY NOISE EXPOSURE – DNL or CNEL (dB) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 50 | 55 | 60 | 65 | 70 | 75 | 80 | |
| Residential – Low Density Single Family, Duplex, Mobile Home | | | | | | | | |
| Residential – Multiple Family | | | | | | | | |
| Transient Lodging – Motels, Hotels | | | | | | | | |
| Schools, Libraries, Churches, Hospitals, Nursing Homes | | | | | | | | |
| Auditoriums, Concert Halls, Amphitheaters | | | | | | | | |
| Sports Arena, Outdoor Spectator Sports | | | | | | | | |
| Playgrounds, Neighborhood Parks | | | | | | | | |
| Golf Courses, Riding Stables, Water Recreation, Cemeteries | | | | | | | | |
| Office Buildings, Business, Commercial, Professional | | | | | | | | |
| Industrial, Manufacturing, Utilities, Agriculture | | | | | | | | |

| | | |
|---|---|---|
| | **Normally Acceptable** | Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. |
| | **Conditionally Acceptable** | New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. |
| | **Normally Unacceptable** | New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design. |
| | **Clearly Unacceptable** | New construction or development generally should not be undertaken. |

SOURCE: California Office of Planning and Research, 2003. General Plan Guidelines.

### Alameda Municipal Code

Section 4.10 of the City of Alameda Municipal Code establishes exterior noise standards. Specifically, exterior noise levels when measured at any receiving single- or multi-family residential, school, hospital, church, public library, or commercial property situated in the City of Alameda do not conform to the provisions of this subsection when they exceed the noise level standards set forth in **Table 4.5-8**, below. In the event the measured ambient noise level exceeds the applicable noise level standard in any category in Table 4.5-8, the applicable standards shall be adjusted so as to equal said ambient noise level. Construction noise is exempted from the noise standards provided it is limited to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. on Saturdays.

**TABLE 4.5-8**
**CITY OF ALAMEDA EXTERIOR NOISE STANDARDS**

| Location | Cumulative Number of Minutes in Any 1-Hour Time Period | 7:00 a.m. to 10:00 p.m. Standard (dBA) | 10:00 p.m. to 7:00 a.m. Standard (dBA) |
|---|---|---|---|
| Single or Multiple Family Residential, School, Hospital, Church, or Public Library Properties | 30 | 55 | 50 |
| | 15 | 60 | 55 |
| | 5 | 65 | 60 |
| | 1 | 70 | 65 |
| | 0 | 75 | 70 |
| Commercial Properties | 30 | 65 | 60 |
| | 15 | 70 | 65 |
| | 5 | 75 | 70 |
| | 1 | 80 | 75 |
| | 0 | 85 | 80 |

SOURCE: Section 4.10 of the City of Alameda Municipal Code.

## *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on noise and vibration that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to noise and vibration (City of Oakland, 2020a). Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA NOI-1: Construction Days/Hours.** *(Standard Condition of Approval 62)*

**Requirement:** The project applicant shall comply with the following restrictions concerning construction days and hours:

a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating

activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m.

b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday.

c. No construction is allowed on Sunday or federal holidays.

Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/occupants' preferences. The project applicant shall notify property owners and occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice.

**SCA NOI-2: Construction Noise.** (*Standard Condition of Approval 63)*

**Requirement:** The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following:

a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible.

b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.

c. Applicant shall use temporary power poles instead of generators where feasible.

d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds,

incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.

e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

**SCA NOI-3: Extreme Construction Noise.** *(Standard Condition of Approval 64)*

***a. Construction Noise Management Plan Required***

**Requirement:** Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90 dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following:

i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;

ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;

iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;

iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and

v. Monitor the effectiveness of noise attenuation measures by taking noise measurements.

***b. Public Notification Required***

**Requirement:** The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented.

**SCA NOI-4: Project-Specific Construction Noise Reduction Measures.** *(Standard Condition of Approval 65)*

**Requirement:** The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to

further reduce construction noise impacts on adjacent receptors along Elmwood Avenue. The project applicant shall implement the approved Plan during construction.

**SCA NOI-5: Construction Noise Complaints.** *(Standard Condition of Approval 66)*

**Requirement:** The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include**:**

a. Designation of an on-site construction complaint and enforcement manager for the project;

b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit;

c. Protocols for receiving, responding to, and tracking received complaints; and

d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request.

**SCA NOI-6: Operational Noise** *(Standard Condition of Approval 68)*

**Requirement:** Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City.

**SCA NOI-7: Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities.** *(Standard Condition of Approval 70)*

**Requirement:** The project applicant shall submit a Vibration Analysis prepared by an acoustical and/or structural engineer or other appropriate qualified professional for City review and approval that establishes pre-construction baseline conditions and threshold levels of vibration that could damage the structure and/or substantially interfere with activities located adjacent to Elmwood Avenue. The Vibration Analysis shall identify design means and methods of construction that shall be utilized in order to not exceed the thresholds. The applicant shall implement the recommendations during construction.

## 4.5.4 Environmental Impacts and Mitigation Measures

### Significance Thresholds

The City of Oakland has established thresholds of significance for CEQA impacts which are consistent with those in Appendix G of the CEQA Guidelines (City of Oakland, 2020b). These adopted thresholds are presented below and have been used in the analysis.

The Project would have a significant impact on the environment if it would:

1. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code section 17.120.050) regarding construction noise (see Table 4.5-6), except if an acoustical analysis is performed that identifies recommended measures to reduce potential impacts;[3]
2. Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code section 8.18.020) regarding persistent construction-related noise;
3. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code section 17.120.050) regarding operational noise (see Table 4.5-5);
4. Generate noise resulting in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or, if under a cumulative scenario where the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the project vicinity without the project (i.e., the cumulative condition including the project compared to the existing conditions) and a 3 dBA permanent increase is attributable to the project (i.e., the cumulative condition including the project compared to the cumulative baseline condition without the project);
5. Expose persons to interior DNL or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single-family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24);
6. Expose the project to community noise in conflict with the land use compatibility guidelines of the Oakland General Plan (see Table 4.5-4) after incorporation of all applicable Standard Conditions of Approval;
7. Expose persons to or generate noise levels in excess of applicable standards established by a regulatory agency (e.g., occupational noise standards of the Occupational Safety and Health Administration [OSHA];)
8. During either project construction or project operation expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration (FTA) (see Table 4.5-3);
9. Be located within an airport land use plan and would expose people residing or working in the project area to excessive noise levels; or
10. Be located within the vicinity of a private airstrip, and would expose people residing or working in the project area to excessive noise levels.

## Approach to Analysis

The methodology for analysis of noise impacts includes an assessment of both construction and operational noise impacts. To assess potential short-term construction noise impacts, sensitive receptors and their relative exposure (considering structural barriers and distance) were identified. Combined intermittent noise levels from the simultaneous operation of onsite equipment expected

[3] The acoustical analysis must identify, at a minimum, (a) the types of construction equipment expected to be used and the noise levels typically associated with the construction equipment and (b) the surrounding land uses including any sensitive land uses (e.g., schools and childcare facilities, health care and nursing homes, public open space). If sensitive land uses are present, the acoustical analysis must recommend measures to reduce potential impacts.

to be used in Project construction were estimated based on equipment noise data published by the Federal Highway Administration (FHWA) using the Roadway Construction Noise Model (RCNM).

Consistent with SCA NOI-3, a CNMP has been prepared for the Project by the Project Applicant's consultant and has been peer reviewed by ESA and the City. The approved CNMP is included as Appendix I and summarized below. The study area for evaluation of noise and vibration impacts from construction encompasses the Project site and the nearest potentially affected sensitive receptors to the proposed facilities. Applying a worst-case daytime noise level (operation of a concrete saw generating 90 dBA at 50 feet) and the most restrictive daytime noise threshold (65 dBA, $L_{eq}$), results in a maximum potential impact distance of 500 feet without mitigation within the City of Oakland. Beyond this distance, all daytime construction noise impacts would be less than significant. Construction noise within the City of Alameda is exempted from the noise standards provided it is limited to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. on Saturdays.

Construction vibration impacts are considered significant if they would either result in levels substantial enough to result in damage to nearby structures or buildings, or result in vibration levels that exceed FTA's groundborne vibration impact criteria presented in Table 4.5-2.

The study area for evaluation of operational noise and vibration impacts encompasses the Project site and receptors up to 0.5 miles away well as receptors along roadways within 0.5 miles based on incremental contribution of traffic by the Project. Operational noise issues evaluated in this section include (1) noise generated by automobile and truck traffic to and from the Project site; (2) building operations/systems such as generators, air conditioners, etc.; and (3) noise from truck idling at loading docks.

Traffic noise modeling to address the effects of the traffic generated by the Project on roadway noise was completed using the FHWA Traffic Noise Model. Traffic noise level significance is determined by comparing the increase in noise levels (traffic contribution only) to increments recognized by the City of Oakland Significance Criterion 4, above, which is a permanent increase in noise levels of 5 dBA or more or, for a cumulative increase that exceeds 5 dBA, a Project contribution to the cumulative scenario of 3 dBA or more.

## Topics Considered and No Impact Determined

The Project would have no impacts related to the following topics based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- ***California Noise Insulation Standards*** (Criterion 5). The Project does not propose uses that include multi-family dwellings, hotels, motels, dormitories and long-term care facilities. Therefore, there would be no impacts related to compliance with California Noise Insulation Standards (CCR Part 2, Title 24) and this topic is not discussed further in this document.
- ***Standards Established by a Regulatory Agency*** (Criterion 7). The Project would not result in impacts with regard to noise levels in excess of applicable standards established by a

regulatory agency (e.g., occupational noise standards of the Occupational Safety and Health Administration [OSHA];). The Project does not propose development of heavy industrial land uses that might require operation of heavy-duty equipment or other substantial noise sources for which worker hearing protection standards of OSHA would apply. Therefore, this topic is not addressed further in this document.

- ***Operational Vibration*** (Criterion 8). The Project would not introduce new operational vibration sources (e.g., impact equipment, streetcar and rail operations, and blasting activities). Therefore, there would be no operational vibration impacts, and operational vibration is not discussed further.

- ***Airport-Related Noise*** (Criteria 9 and 10). The Project would not result in significant impacts pursuant to criteria 10 or 11 (airport-related noise impact), listed above. The Project site is not located within an airport influence area of the nearby Oakland International Airport (Alameda County Community Development Agency, 2010) or in the vicinity of a private airstrip; therefore, the Project would not result in an impact related to exposure to excessive aircraft noise. Therefore, these topics are not addressed further in this document.

## Project Impacts and Discussion

**Impact NOI-1: Construction of the Project would not generate noise in violation of the noise ordinances of the Cities of Oakland or Alameda. (Criteria 1 and 2) (*Less than Significant, with SCAs*)**

The Project would involve demolition of several existing buildings onsite and construction of a single building providing approximately 430,000 square feet of space. The Project would also include several offsite improvements. The Project would shift Alameda Avenue approximately 100 feet inland and build new pedestrian sidewalks and bike facilities. The Project re-opens Boehmer Street to create a new connection between 36th and 37th Avenues and extend 37th Avenue southward up to Alameda Avenue along the eastern boundary of the Project site. The Project would also construct a new sidewalk improvements around the site perimeter. Construction of the Project is expected to commence in the first quarter of 2024 and last over a period of 17 months.

Construction of the Project would intermittently generate high noise levels in the vicinity of the Project site. Demolition of the existing buildings, grading and excavation, and building construction would involve the use of construction equipment that generate substantial noise. Noise impacts from construction activity would depend on the type of activity being undertaken and the distance to the receptor location. Construction noise impacts are most severe if construction activities take place during the noise sensitive hours (i.e., early morning, evening, or nighttime hours), in areas immediately adjoining noise-sensitive land uses, or when construction duration lasts over extended periods of time.

Demolition, grading, and site preparation would require equipment such as concrete saws, excavators, dumpers/tenders, air compressors, rollers, and water trucks. These activities are anticipated to be the loudest construction phases of the Project, mainly due to the use of larger off-road equipment as compared to later construction phases. Construction activities known to generate extreme noise levels such as drilling, impact pile driving, and blasting would not be

required for the Project; however, work involving concrete saws would be required for a period of 12 weeks during the demolition phase, which could generate noise levels upwards of 90 dBA as shown below.

The operation of each piece of off-road equipment on the Project site would not be constant throughout the day, as equipment would be turned off when not in use. Over a typical workday, equipment would be operating at different locations within the Project site and would not always be operating concurrently. However, for a conservative approximation of construction noise levels that the closest sensitive receptor would be exposed to, consistent with the methodology recommended by FTA, it is assumed for this analysis that the two loudest pieces of construction equipment would be operating at the same time at a point on the Project boundary closest to the sensitive receptors.

**Table 4.5-9** shows typical maximum noise levels produced by various types of construction equipment that are expected to be used for Project construction. The table also shows the acoustical usage factors for each piece of equipment. The acoustical usage factor is the fraction of time in an hour that the equipment generates noise at the maximum level and is accounted for in the calculation of the hourly $L_{eq}$ level.

**TABLE 4.5-9**
**TYPICAL MAXIMUM NOISE LEVELS FROM CONSTRUCTION EQUIPMENT**

| Construction Equipment | Noise Level (dBA, $L_{max}$ at 50 feet) | Acoustical Usage Factor (%) |
|---|---|---|
| Aerial Lift | 75 | 20 |
| Air Compressor | 78 | 40 |
| Backhoe | 78 | 40 |
| Concrete/Industrial Saw | 90 | 20 |
| Crushing/Processing Equipment | 85 | 50 |
| Dump Truck | 76 | 40 |
| Excavator | 81 | 40 |
| Forklift | 75 | 20 |
| Paver | 77 | 50 |
| Roller | 80 | 20 |
| Rough Terrain Forklift | 75 | 20 |
| Skid Steer Loader | 79 | 40 |

NOTES:

These are maximum field measured values at 50 feet as reported from multiple samples. Concrete crusher processing noise level based on data from H.M. Pitt Labs, 2006.

SOURCE: FHWA, 2006.

Project construction activity would generate temporary noise impacts at nearest noise-sensitive receptors, the single-family residences along Elmwood Avenue approximately 40 feet from the Project's northern boundary. Other receptors located farther away, including receptors across the Tidal Canal within the City of Alameda, would be affected to a lesser extent. Using the reference noise levels in the Roadway Construction Noise Model (RCNM) provided in Table 4.5-9,

operation of the noisiest equipment proposed to be used for Project construction (concrete saw) could generate $L_{max}$ noise levels of 92 dBA and 65 dBA, at distances of 40 feet and 500 feet, respectively. The combined attenuated noise level from the simultaneous operation of two concrete saws, taking into account their usage factors, would be 88 dBA, $L_{eq}$ at the nearest sensitive receptors along Elmwood Avenue and 61 dBA, $L_{eq}$ at the Alameda receptors. This would exceed the 65 dBA Maximum Allowable Receiving Noise Standards for Temporary Construction or Demolition Activities in the City of Oakland's noise ordinance for activities lasting longer than 10 days (shown in Table 4.5-6). Note, construction noise is exempted from the City of Alameda noise standards (shown in Table 4.5-8) provided it is limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. on Saturdays.

Although construction noise would cause temporary impacts to nearby residents, adherence to the City's SCAs would reduce this impact to a less-than-significant level. Required implementation of applicable City of Oakland SCAs would minimize construction noise by limiting hours of construction activities, requiring best available noise control technology and notification of any local residents of construction activities, and by tracking and responding to noise complaints. Specifically, Project construction would comply with the following SCAs: SCA NOI-1, Construction Days/Hours, which limits construction hours mirroring Noise Ordinance requirements; SCA NOI-2, Construction Noise, which requires projects to implement construction noise reduction measures; SCA NOI-3, Extreme Construction Noise, which requires the preparation of a Construction Noise Management Plan (CNMP); SCA NOI-4, Project-Specific Construction Noise Reduction Measures, which requires City approval of site-specific noise attenuation measures to reduce impacts to specific receptors; and SCA NOI-5, Construction Noise Complaints, which sets a protocol for receiving and addressing construction noise complaints from the public.

As noted above, consistent with SCA NOI-3, a CNMP has been prepared for the Project by the Project Applicant's consultant and has been peer reviewed by ESA and the City. The approved CNMP is included as Appendix I. Site-specific measures identified by the CNMP to attenuate noise include: route construction-related traffic away from sensitive receptors; prohibit unnecessary idling; use the smallest equipment capable of safely completing work; minimize impact devises; maintain and operate equipment to minimize noise; grade surface irregularities; stage noise-generating equipment at least 25 feet from the site perimeters; locate stockpiles and equipment as far as feasible from sensitive receptors; phase demolition activities to take advantage of acoustical shielding; erect temporary construction noise barriers at the site perimeter shared with the residential uses to the north and west; control noise from construction workers' radios; identify and track noise complaints using a designated on-site construction complain and enforcement manager; and construction noise monitoring. The CNMP includes a requirement to conduct noise monitoring if reliable noise complaints are received during demolition, excavation, and/or construction activities. Noise levels would be monitored at the location from which the noise complaint(s) originated and/or the worst-case façade window exposure at the complaint location by a qualified acoustical professional. If the measured noise levels during this test were to exceed the City's construction noise performance standards, an acoustical professional shall be retained to specify additional noise attenuation measures to reduce noise levels to City Standards.

The CNMP identified site-specific noise attenuation measure could include additional ground level noise barriers or noise control blanketing of the building structure.

Therefore, with adherence to SCAs NOI-1 through NOI-5, construction of the Project would not generate noise in violation of the City of Oakland Noise Ordinance and impacts would be less than significant.

**SCA NOI-1, Construction Days/Hours.**

**SCA NOI-2, Construction Noise.**

**SCA NOI-3, Extreme Construction Noise.**

**SCA NOI-4: Project-Specific Construction Noise Reduction Measures.**

**SCA NOI-5, Construction Noise Complaints.**

**Significance:** Significant and Unavoidable.

---

**Impact NOI-2: Stationary sources associated with the operation of the Project would not generate noise in violation of the City of Oakland Noise Ordinance. (Criterion 3) (*Less than Significant with SCAs*)**

Once operational, the Project would include stationary sources such as heating, ventilating, and air conditioning (HVAC) mechanical equipment and the operation of the proposed emergency generator as part of routine testing and maintenance. Such equipment would be operated within the restrictions of the City's Noise Ordinance. Chapter 17.120.050 of the City of Oakland Planning Code specifies the maximum sound level received at residential, public open spaces, and commercial land uses. Development of the Project would be required to comply with SCA NOI-6, Operational Noise, which ensures compliance with operational noise limits in the City's Noise Ordinance and would result in a less-than-significant impact with respect to noise from operational stationary sources on the Project site.

**SCA NOI-6, Operational Noise.**

**Mitigation:** None required.

---

**Impact NOI-3: The Project would not generate noise that would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project. (Criterion 4) (*Less than Significant*)**

In addition to operational noise from stationary sources discussed under Impact NOI-2, the Project would also generate operational noise impacts from an increase in Project-related traffic. The Project would generate additional vehicle trips to the Project site resulting in an increase in

traffic along the roadway network in and around the area. This would increase noise levels along roadway segments and intersections leading to the area.

Traffic noise levels along roadway segments most affected by Project traffic were determined using algorithms of the FHWA Traffic Noise Prediction Model Technical Manual and evening peak hour turning movements for Existing and Existing plus Project conditions from the traffic analysis prepared for the Project. Intersections selected for analysis were based on the presence of sensitive receptors along the roadway segments. The segments analyzed and the modeled noise increases along these segments are shown in **Table 4.5-10**, below.

**TABLE 4.5-10**
**PEAK-HOUR TRAFFIC NOISE LEVELS (dBA) NEAR THE PROJECT SITE[a,b]**

| Roadway Segment | Hourly $L_{eq}$, dBA | | |
|---|---|---|---|
| | Existing | Existing Plus Project | Difference between Existing Plus Project and Existing |
| E 9th Street east of Fruitvale Avenue | 62.1 | 62.1 | +0.0 |
| E 8th Street east of Fruitvale Avenue | 57.9 | 59.0 | +1.1 |
| Elmwood Avenue west of Fruitvale Avenue | 62.3 | 62.6 | +0.3 |
| Fruitvale Avenue south of E 8th Street/Elmwood Avenue | 67.6 | 67.7 | +0.1 |
| East 7th Street west of Fruitvale Avenue | 58.9 | 58.9 | +0.2 |
| Fruitvale Avenue north of East 7th Street | 67.6 | 67.7 | +0.1 |
| High Street north of Howard Street | 68.9 | 69.0 | +0.1 |

NOTES:
[a] Noise levels were determine using methodology described in FHWA Traffic Noise Model Technical Manual.
[b] Traffic noise increases greater than 5 dB is considered a significant increase in ambient noise levels according to the City of Oakland significance thresholds.

The City of Oakland considers a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project to be significant. As shown in Table 4.5-10, the increase in traffic noise from the Existing plus Project scenario compared to the Existing scenario would be less than 5 dBA at all analyzed roadway segments and would therefore result in a less-than-significant impact with respect to traffic noise along these roadway segments.

**Mitigation:** None required.

---

### Impact NOI-4: The Project would not be inconsistent with the land use compatibility guidelines of the Oakland General Plan for the proposed land uses. (Criterion 6) (*Less than Significant*)

The City of Oakland's land use compatibility guidelines specify the community ambient noise level that would be considered "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" for various uses. For industrial uses, an ambient noise

environment of up to 70 dBA, DNL is considered "normally acceptable" while ambient noise levels of 70 to 80 dBA, DNL are considered "conditionally acceptable". Based on noise monitoring conducted for the Project, the ambient noise level of 72 dBA, DNL measured at the receptors to the north of the Project site would attenuate to less than 70 dBA, DNL at the Project buildings and would therefore be considered normally acceptable for industrial uses. Therefore, additional SCAs related to exposure to community noise would not be required and the impact would be considered less than significant.

**Mitigation:** None required.

---

**Impact NOI-5: Project construction would not expose persons to or generate groundborne vibration that exceeds the criteria established by the Federal Transit Administration. (Criterion 8) (*Less than Significant with SCAs*)**

The Project does not include new residential uses nor is it located adjacent to an active rail line. Therefore, the Project would not introduce new receptors that would be exposed to excessive vibration levels. However, off-site structures are located as close as 10 feet from the northern boundary of the Project site. These structures could be affected by vibration generated by the Project during construction activities. The Project would be subject to SCA NOI-7, Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities, which would require a vibration analysis for the Project. With the required implementation of this measure, vibration impacts from Project construction to adjacent structures would be reduced to a less-than-significant level.

**SCA NOI-7, Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities.**

**Mitigation:** None required.

---

## 4.5.5 Cumulative

The geographic scope for cumulative effects on noise includes the immediate vicinity with 0.5 miles of the Project site boundaries. Vibration impacts are even more localized and are experienced within 100 feet of vibration sources beyond which vibration levels rapidly attenuate with distance.

**Impact NOI-1.CU: The Project, combined with cumulative development in the Project vicinity, would not result in a cumulatively considerable temporary or permanent increase in ambient noise levels in the Project vicinity. (Criteria 1, 2, 3, 4 and 8) (*Less than Significant with SCAs*)**

### Construction Noise and Vibration

The Project's impacts in combination with construction noise and vibration impacts from other projects in the vicinity of the Project site could lead to cumulative increase in noise at the nearby

receptors. According to the May 2022 map of current projects (Appendix B), the only cumulative project within 1,000 feet of the Project site is a sound wall at 3927 Wattling Street. This minor project, which would construct a new 904-foot long, 16-foot-tall sound wall separating a new residential development from the railroad, was approved in October 2019. Further, all projects would be required to implement applicable SCAs to reduce their construction-related noise and vibration impacts to less-than-significant levels. Also, cumulative projects in Alameda would be far enough from the Project site not to affect noise and vibration levels at receptors in the vicinity of the Project site. Cumulative construction noise and vibration impacts would be less than significant with the implementation of applicable SCAs. The Project's cumulative impact is less than significant.

### Operation

As with the Project, all cumulative projects would be required to implement SCA NOI-5 to reduce noise from stationary sources. Therefore, once operational, the Project would contribute to the cumulative noise environment in the vicinity primarily through an increase in traffic. Project traffic, in combination with traffic generated by other projects proposed in the area, would lead to a cumulative increase in roadside noise levels.

Cumulative increase in traffic noise levels along roadway segments most affected by Project traffic were estimated using algorithms of the FHWA Traffic Noise Prediction Model Technical Manual and evening peak hour turning movements for 2040 and 2040 plus Project conditions from the traffic analysis prepared for the Project. The results are shown in **Table 4.5-11**, below.

**TABLE 4.5-11**
**PEAK-HOUR CUMULATIVE TRAFFIC NOISE LEVELS (dBA) NEAR THE PROJECT**

| Roadway Segment | Existing (A) | Cumulative (2040) No Project (B) | Cumulative (2040) Plus Project (C) | C–A |
|---|---|---|---|---|
| E 9th Street east of Fruitvale Avenue | 62.1 | 63.1 | 63.1 | +1.0 |
| E 8th Street east of Fruitvale Avenue | 57.9 | 58.7 | 58.7 | +0.8 |
| Elmwood Avenue west of Fruitvale Avenue | 62.3 | 63.1 | 63.4 | +1.1 |
| Fruitvale Avenue south of E 8th Street/Elmwood Avenue | 67.6 | 68.5 | 68.6 | +1.0 |
| East 7th Street west of Fruitvale Avenue | 58.9 | 59.7 | 59.9 | +1.0 |
| Fruitvale Avenue north of East 7th Street | 67.6 | 68.5 | 68.7 | +1.1 |
| High Street north of Howard Street | 68.9 | 69.8 | 69.8 | +0.9 |

NOTES:
[a] Noise levels were determine using methodology described in FHWA Traffic Noise Model Technical Manual.
[b] Traffic noise increases greater than 5 dB is considered a significant increase in ambient noise levels according to the City of Oakland significance thresholds.

The City of Oakland considers a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project to be significant. As shown in Table 4.5-11, the increase in cumulative traffic noise with the Project when compared to the existing traffic noise levels would be less than the City's incremental threshold of 5 dBA along all analyzed intersections. Therefore, the cumulative impact of traffic noise would be less than significant.

**SCA NOI-1, Construction Days/Hours.**

**SCA NOI-2, Construction Noise.**

**SCA NOI-3, Extreme Construction Noise.**

**SCA NOI-4: Project-Specific Construction Noise Reduction Measures.**

**SCA NOI-5, Construction Noise Complaints.**

**SCA NOI-6, Operational Noise.**

**SCA NOI-7, Vibration Impacts on Adjacent Structures or Vibration-Sensitive Activities.**

**Mitigation:** None required.

---

## 4.5.6 References

Alameda County Community Development Agency. 2010. *Oakland International Airport – Airport Land Use Compatibility Plan*. December 2010. Accessed April 2022. https://www.acgov.org/cda/planning/generalplans/documents/OAK_ALUCP_122010_FULL.pdf.

California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013. Accessed April 2022. https://www.dtsc-ssfl.com/files/lib_ceqa/ref_draft_peir/Chap4_10-Noise/Caltrans_2013a_Tech_Noise_Supplement.pdf.

Caltrans. 2020. *Transportation and Construction Vibration Guidance Manual*. April 2020. Accessed April 2022. https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf.

City of Alameda. 2017. *General Plan, Safety and Noise Element*. Note that a combined Safety and Noise element became effective on January 1, 2017. Accessed April 2022. https://www.alamedaca.gov/files/assets/public/departments/alameda/building-planning-transportation/general-plan/general-plan-chapter-8-2017.pdf.

City of Oakland. 2005. *General Plan, Noise Element*. June 21, 2005. Accessed April 2022. https://cao-94612.s3.amazonaws.com/documents/oak070995.pdf.

Federal Highway Administration (FHWA). 2006. *Construction Noise Handbook*. August 2006. Accessed April 2022. https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/.

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. September 2018. Accessed April 2022. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

Governor's Office of Planning and Research (OPR). 2017. *State of California 2017 General Plan Guidelines*. Accessed April 2022. https://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf.

U.S. Environmental Protection Agency (U.S. EPA). 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. March 1974. Accessed March 14, 2019. https://nepis.epa.gov/Exe/ZyPDF.cgi/2000L3LN.PDF?Dockey=2000L3LN.PDF.

# 4.6 Transportation and Circulation

## 4.6.1 Introduction

This section describes the transportation and circulation conditions in the vicinity of the Project site including transit services, pedestrian and bicycle facilities, and motor vehicle traffic; discusses the State and local regulations and policies pertinent to transportation and circulation; assesses the potentially significant transportation and circulation impacts of the Project; and provides, where appropriate, mitigation measures to address those impacts.

The analysis was conducted in compliance with the City of Oakland *Transportation Impact Review Guidelines* (City of Oakland, 2017a) in effect at the time of the Notice of Preparation (NOP).

Travel behavior within the last couple of years has changed at a global level due to the COVID-19 pandemic. In Oakland and the surrounding areas, travel patterns (both amount and mode of trips) have changed significantly since a "shelter-in-place" order was issued on March 17, 2020, and subsequently modified. Unless otherwise noted, the existing conditions presented in this section, such as roadway volumes and transit schedules, are based on data collection or observations prior to the start of the pandemic. The impact analysis presented in this section is generally based on the assumption that long-term travel behavior characteristics would be similar to conditions prior to the start of the pandemic, because, at present, the medium- or long-term effects of the COVID-19 pandemic on travel behavior are uncertain and it would be speculative to estimate any potential long-term or permanent changes.

## 4.6.2 Environmental Setting

The existing transportation-related context in which the Project would be implemented is described below, beginning with a description of the study area and street network serving the Project site. Existing transit, bicycle, and pedestrian facilities are also described. Current conditions for roadways in the Project vicinity are summarized. This section also discusses planned changes to transportation facilities/operating conditions in Oakland near the Project site as well as applicable planning policies.

### Existing Roadway Network

Existing regional freeway access to the Project site is provided via Interstate 880 (I-880). Direct vehicular access to the site is provided via local roadways: Fruitvale Avenue, which borders the site on the west, and Alameda Avenue, which borders the site on the south and terminates at the intersection with Fruitvale Avenue. Generally, the street network in the Project vicinity does not align with a north–south/east–west orientation. This analysis assumes that Fruitvale Avenue is a north-south street and East 7th Street is an east-west street.

Roadways serving the Project study area are described below.

- *I-880* is generally an eight-lane north–south freeway (in the Project vicinity, I-880 has an east-west orientation) connecting I-80 in Oakland in the north to I-280 in San Jose in the south. Access between I-880 and the Project site is provided through interchanges at 29th Avenue, Fruitvale Avenue, and 42nd Avenue/High Street. I-880 has an average daily traffic volumes (AADT) of approximately 213,700 vehicles per day just south of Fruitvale Avenue (Caltrans, 2019).

- *Fruitvale Avenue* is a two-to-four-lane north–south major arterial adjacent to the west side of the Project. It extends between Hoover Avenue in the Oakland Hills in the north and Blanding Avenue in Alameda in the south. Fruitvale Avenue north of East 12th Street and south of Alameda Avenue are designated as truck routes in the City of Oakland (Oakland, 2021).

- *Alameda Avenue* is a two-lane east–west minor arterial adjacent to the south side of the Project. It extends between Fruitvale Avenue in the west and the Oakport Street/High Street intersection in the east. Alameda Avenue is a designated truck route in the City of Oakland.

- *High Street* is a four-lane north–south street in the Project vicinity that extends between Tompkins Avenue in East Oakland in the north and Otis Drive in Alameda in the south. The segment of High Street between I-880 and I-580 is designated as a major arterial and the segments south of I-880 and east of I-580 are designated as minor arterials. Segments of High Street between International Boulevard and I-580 and between San Leandro Street and the Estuary are designated truck routes in the City of Oakland.

- *Oakport Street* is a two-lane east–west collector street in the Project vicinity. It is parallel to and south of I-880 and extends between 42nd Avenue in the west and Edgewood Drive in the east.

- *Coliseum Way* is east–west collector street that provides two to three lanes in the Project vicinity. It extends between 42nd Avenue in the west and Hegenberger Road in the east.

- *East 7th Street* is a two-lane east–west local street just west of the Project. It extends between the Embarcadero in the west and Fruitvale Avenue in the east.

- *Elmwood Avenue* is a two-lane east–west local street in the Project vicinity. It extends from the I-880/Elmwood off-ramp in the west to Fruitvale Avenue, where it jogs south and continues east to 34th Avenue and ends in a cul-de-sac east of 34th Avenue.

- *East 8th Street* is a two-lane east–west local street in the Project vicinity. It extends between Fruitvale Avenue in the west and 37th Avenue in the east.

- *East 9th Street* is a two-to-three-lane east–west local street in the Project vicinity. It extends between 23rd Avenue in the west and 37th Avenue in the east.

- *37th Avenue* is a two-lane north–south local street adjacent to the east side of the Project. It extends between Cesar Chavez Park in East Oakland in the north and ends in a cul-de-sac south of Boehmer Street and adjacent to the east side of the Project site, with a discontinuous section between East 8th and East 9th Streets across the I-880 freeway. The Project would extend 37th Avenue south to connect with Alameda Avenue.

## Existing Transit Services

Transit service providers in the Project vicinity include the Alameda–Contra Costa Transit (AC Transit) which provides local and transbay bus service, and the Bay Area Rapid Transit (BART) which provides regional rail service. An overview of transit service in the Project vicinity is shown in **Figure 4.6-1** and described below.

### *Bus Services*

AC Transit is the primary bus service provider in 13 cities and adjacent unincorporated areas in Alameda and Contra Costa Counties, with transbay service to destinations in San Francisco, San Mateo, and Santa Clara Counties. AC Transit reports serving about 175,000 riders in Alameda County on a typical weekday in 2019 (AC Transit, 2019b).

**Table 4.6-1** summarizes the AC Transit lines operating in the Project vicinity as of January 2022 (AC Transit 2022). AC Transit operates Lines 19, 51A, 78, 851, and O along Fruitvale Avenue. The nearest bus stops to the Project site are on northbound Fruitvale Avenue between East 8th and East 9th Streets under the I-880 overpass and on southbound Fruitvale Avenue just north of East 9th Street. Neither stop provides any amenities.

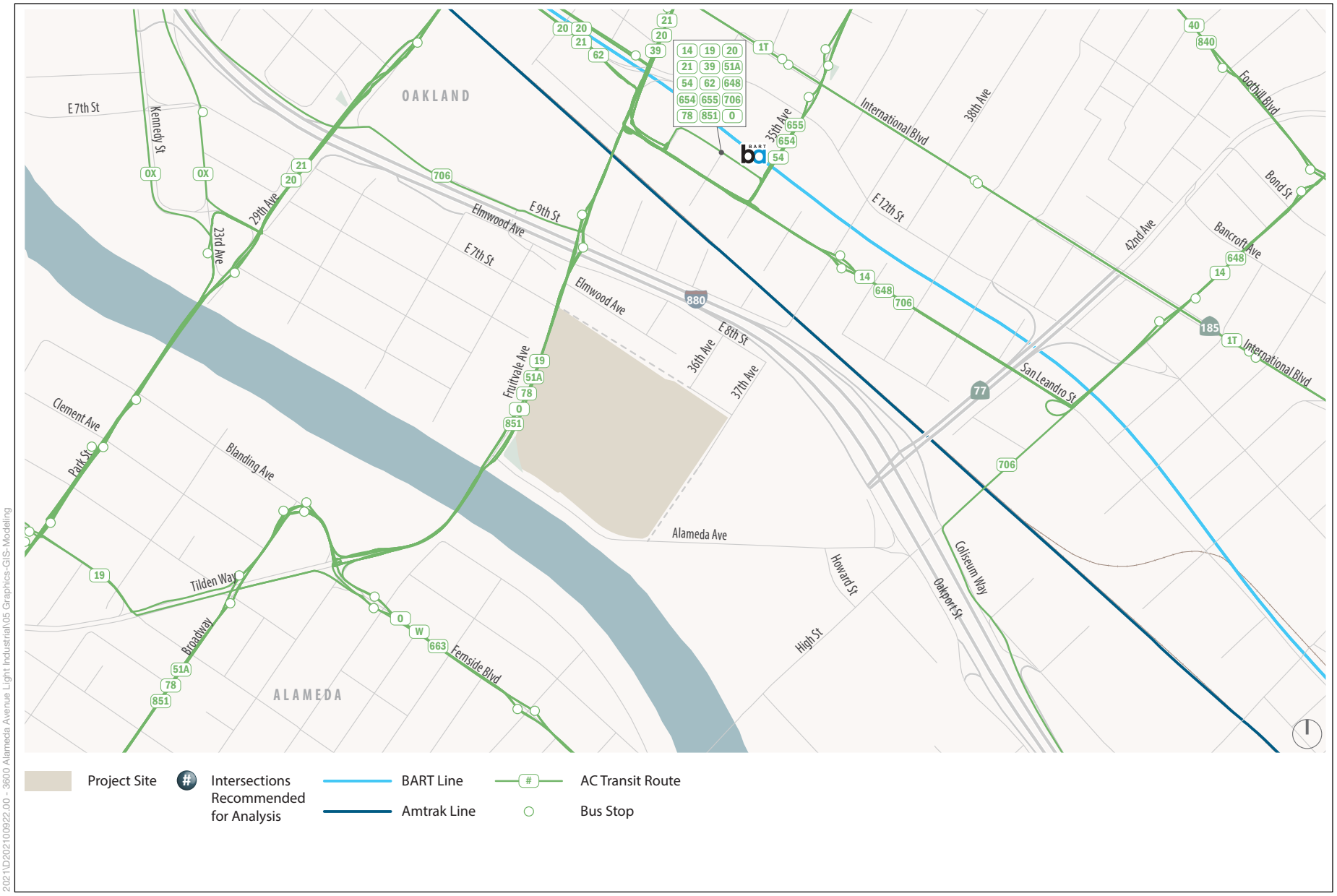
**TABLE 4.6-1**
**AC TRANSIT LINES NEAR THE PROJECT SITE[a]**

| Line | Description | Weekday | | Weekend | |
|---|---|---|---|---|---|
| | | Hours of Operation | Headways | Hours of Operation | Headways |
| 19 | Downtown Oakland to Fruitvale BART via the Webster/Posey tubes, Marina Village Pkwy., Atlantic Ave., Buena Vista Ave., Alameda Bridgeside Center, and Fruitvale Ave. | 6:45 a.m.–9:45 p.m. | 60 min | 6:50 a.m.–9:50 p.m. | 60 min |
| 51A | Rockridge BART to Fruitvale BART via College Ave., Broadway (Oakland), Webster St., Santa Clara Ave., and Broadway (Alameda). | 5:00 a.m.–12:40 a.m. | 10 min | 5:30 a.m.–12:45 a.m. | 15 min |
| 78 | Fruitvale BART to Alameda Seaplane Lagoon Ferry Terminal and USS Hornet Museum via Fruitvale Bridge, Alameda Bridgeside Center, Santa Clara Ave., Webster St., and Ralph Appezzato Memorial Parkway. | 6:00 a.m.–11:10 a.m. | Before 7:30 p.m.: 30–60 min; After 7:30 p.m.: 90 min | N/A | N/A |
| 851 | All Nighter. Downtown Berkeley to Fruitvale BART via Southside Berkeley (UC campus), College Ave., Broadway, Uptown Oakland, Downtown Oakland, Webster St., Santa Clara Ave., Broadway, and Fruitvale Ave. | 12:15 a.m.–5:00 a.m. | 60 min | 12:15 a.m.–5:00 a.m. | 60 min |
| O | Fruitvale BART to Salesforce Transit Center, San Francisco, via Fruitvale Bridge, Fernside Blvd., High St., Encinal Ave., Broadway, Santa Clara Ave. and Webster St. | 5:00 a.m.–10:40 p.m. | 30 min | 5:00 a.m.–10:40 p.m. | 30 min |

NOTES:

[a] Service descriptions as of January 2022.

SOURCE: AC Transit, 2022; summarized by Fehr & Peers.




2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: Fehr & Peers, 2022

3600 Alameda Industrial Project

**Figure 4.6-1**
Existing Transit Service

ESA

### *Bay Area Rapid Transit*

BART provides regional rail service between San Francisco, northern San Mateo County, the northern Santa Clara County, and the East Bay. Based on BART Monthly Ridership Reports, the average weekday ridership in 2019 was about 411,000 systemwide. The nearest BART station to the Project is the Fruitvale Station, about a 0.6-mile walking distance north of the Project. This station is served by the Dublin/Pleasanton-Daly City, Berryessa/North San Jose-Richmond, and Berryessa/North San Jose-Daly City lines.

The Fruitvale station is served by about 20 trains per hour during the peak periods. Based on BART monthly ridership reports, about 16,100 weekday daily passengers (entries plus exits) were served at the Fruitvale station in fall 2019.

## Existing Bicycle Network

The City of Oakland 2019 Oakland Bike Plan (Let's Bike Oakland) identifies the following bicycle facility types.

- *Class 1 Paths* are located off-street and can serve both bicyclists and pedestrians. Recreational trails can be considered Class 1 facilities. Class 1 paths are typically 8 to 10 feet wide, excluding shoulders, and are generally paved.
- *Class 2 Bicycle Lanes* provide a dedicated area for bicyclists within the paved street width using striping and appropriate signage. These facilities are typically 5 to 6 feet wide.
- *Class 2B Buffered Bicycle Lanes* provide a dedicated area for bicyclists within the paved street, separated from the motor vehicle travel lanes by a painted buffer.
- *Class 3 Bicycle Routes* are located along streets that do not provide enough width for dedicated bicycle lanes. The street is then designated as a bicycle route using signage, informing drivers to expect bicyclists.
- *Class 3A Arterial Bicycle Routes* are located along some arterial streets where bicycle lanes are not feasible and parallel streets do not provide adequate connectivity. Speed limits as low as 25 miles per hour (mph), and shared-lane bicycle stencils, wide curb lanes, and signage are used to encourage shared use. According to the 2019 Oakland Bike Plan, New Class 3A facilities will no longer be proposed.
- *Class 3B Neighborhood Bike Routes* are located along residential streets with low traffic volumes. Assignment of right-of-way to the route, traffic calming measures, and bicycle traffic signal actuation are used to prioritize through-trips for bicycles.
- *Class 4 Protected Bicycle Lanes*, also known as cycle tracks, provide space that is exclusively for bicyclists and separated from motor vehicle travel lanes, parking lanes, and sidewalks. Parked cars, curbs, bollards, or planter boxes provide physical separation between bicyclists and moving cars. Where on-street parking is allowed, it is placed between the bikeway and the travel lanes (rather than between the bikeway and the sidewalk, as is typical for Class 2 bicycle lanes).

**Figure 4.6-2** shows the existing and proposed bicycle facilities in the Project vicinity per the City's Bike Plan. Key existing bicycle facilities serving the Project site are:

- Class 2 bicycle lanes on both directions of Fruitvale Avenue
- Class 3 neighborhood bicycle route on East 7th Street west of Fruitvale Avenue
- Class 2 bicycle lanes on both directions of Alameda Avenue
- Class 1 path along the Oakland Estuary, accessible via a curb cut on the south side of Alameda Avenue located approximately 850-feet east of the intersection with Fruitvale Avenue. This facility is part of the San Francisco Bay Trail.

## Existing Pedestrian Network

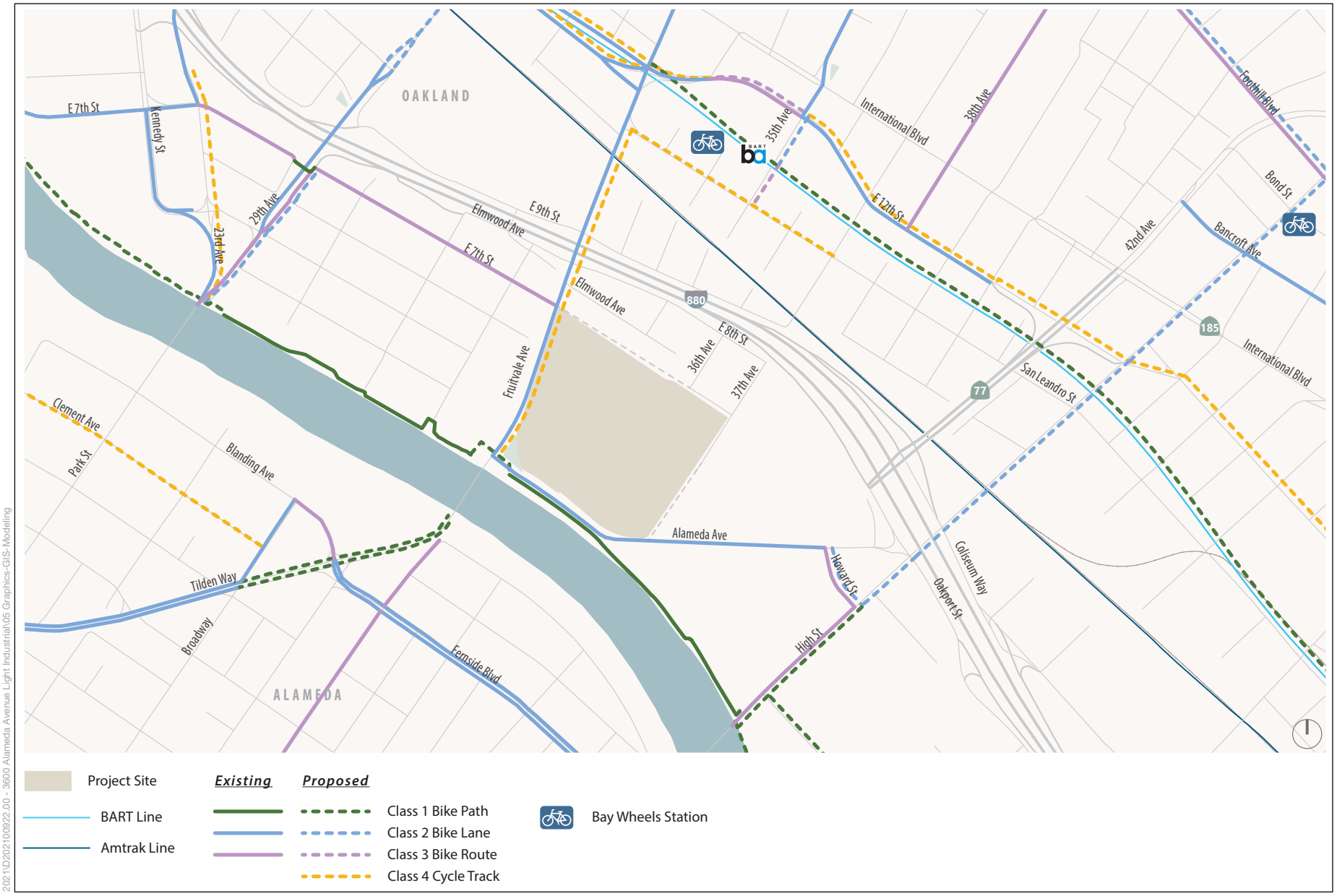
Pedestrian facilities generally include sidewalks, paths, and stairs. Other types of pedestrian facilities include marked crosswalks, curb ramps, pedestrian signal heads and buttons, lighting, curb extensions, and wayfinding signs.

Most existing streets in the Project vicinity provide sidewalks on at least one side of the street. Sidewalks along Fruitvale Avenue range from 5.5 to 10 feet wide and sidewalks along Alameda Avenue range from 6 to 10 feet wide. Other sidewalks on the adjacent streets are 5.5 to 6 feet wide. Gaps in the sidewalk network include the north side of East 8th Street adjacent to the freeway, the north side of East 7th Street between Lancaster Street and Fruitvale Avenue, and the south side of Alameda Avenue just east of the Project site.

Existing pedestrian facilities at intersections adjacent to the Project site include the following:

- The Fruitvale Avenue/East 7th Street intersection is a three-way unsignalized intersection with a side-street stop control on the eastbound East 7th Street approach and includes diagonal curb ramps with truncated domes on the northwest and southwest corners. The eastbound East 7th Street approach also provides a crosswalk marked by white lines and no marked crosswalks are provided across Fruitvale Avenue.
- The Fruitvale Avenue/Alameda Avenue intersection is signalized and includes diagonal curb ramps on the northeast and southeast corners and a parallel curb ramp on the northwest corner of the intersection. All ramps include truncated domes. The southbound Fruitvale Avenue and the westbound Alameda Avenue approaches provide crosswalks marked by white lines. Pedestrian countdown signal heads and pushbuttons are provided in all directions of marked crossings. The southbound Fruitvale Avenue approach includes a raised median and pedestrian refuge with a pushbutton.

The segment of Fruitvale Avenue between Alameda Avenue and East 16th Steet is included in the City's High Injury Network per the City of Oakland Pedestrian Master Plan, *Oakland Walks!* The Pedestrian Master Plan recommends widening sidewalks and adding high visibility crosswalks, bulb outs, improved pavement, lighting, and pedestrian signal upgrades along this segment of the corridor. The *Fruitvale Alive!* Project, as described in the Planned Transportation Network Changes section, will implement these improvements.




2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: Fehr & Peers, 2022

3600 Alameda Industrial Project

**Figure 4.6-2**
Existing and Proposed Bicycle Facilities

ESA

## Existing Vehicle Miles Traveled

Vehicle miles traveled, or VMT, refers to the amount and distance of automobile travel attributable to a project. In 2013, Governor Jerry Brown signed Senate Bill (SB) 743, which added Public Resources Code Section 21099 to CEQA, to change the way that transportation impacts are analyzed under CEQA to better align local environmental review with statewide objectives to reduce greenhouse gas (GHG) emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl development, and reduce VMT in California. Oakland adopted VMT thresholds in September 2016 to implement the directive from SB 743 (discussed in more detail in the State discussion in Section 4.6.2, *Regulatory Setting*).

Increased VMT leads to several direct and indirect impacts on the environment and human health. Among other effects, increasing VMT on the roadway network leads to increased emissions of air pollutants, including GHGs, as well as increased consumption of energy. Transportation is associated with more GHG emissions than any other sector in California. As documented in the City of Oakland Equitable Climate Action Plan (updated July 2020), 67 percent of Oakland's local GHG emissions are produced by transportation (City of Oakland, 2020). Making transportation more efficient by reducing VMT per capita is the most effective means to reduce GHG emissions per capita.

The Metropolitan Transportation Commission (MTC) Travel Model can be used to estimate VMT.[1] The model includes year 2020, which approximates existing conditions. Based on the MTC Travel Model, the existing regional average VMT per worker is 21.8, while the VMT per worker in the Project area is 21.1.

## Existing Railroad Characteristics

The Union Pacific Railroad Company (UPRR) is a freight-hauling railroad company that owns and operates the rail line west of the Project site on the west side of Fruitvale Avenue. The single set of tracks is used by freight trains and primarily serve the local industrial uses. In the Project vicinity, three at-grade crossings are provided at East 7th Street, Elmwood Avenue, and East 9th Street, just west of Fruitvale Avenue. **Table 4.6-2** summarizes the characteristics of these crossings, which are public at-grade crossings. Federal Railroad Administration (FRA, 2022) data shows an average of two train movements per day, with the maximum speed of 10 mph, at these three at-grade crossings. The FRA accident/incident reports for at-grade railroad crossings report no collisions at these three at-grade railroad crossings in the last ten years.

[1] MTC VMT estimates for each TAZ in the region are published through online maps, including Simulated VMT per Capita by Place of Residence and Simulated VMT per Capita by Place of Work (at https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=5dac76d69b3d41e583882e146491568b and https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=98463b4f73ca43c5944a5c30648fd689, respectively).

**TABLE 4.6-2**
**AT-GRADE RAILROAD CROSSING INVENTORY**

| Inventory | Locations | | |
|---|---|---|---|
| | East 7th Street, west of Fruitvale Avenue | Elmwood Avenue, west of Fruitvale Avenue | East 9th Street, west of Fruitvale Avenue |
| Train Crossing Speed (mph) | 5-10 | 5-10 | 5-10 |
| # of Train Tracks | 1 | 1 | 1 |
| # of Traffic Lanes Crossing Railroad | 2 | 2 | 2 |
| **Traffic Control Devices** | | | |
| Advance Warning | W10-1, W10-3 | W10-1 | W10-1 |
| Pavement Markings | Yes | Yes | Yes |
| Train Signals | No | Yes | Yes |
| Bells | No | Yes | Yes |
| Gates | No | Yes | Yes |
| Four Quadrant Gates | No | No | No |
| Overhead Warning Light | No | Yes | Yes |

SOURCE: US Department of Transportation Federal Railroad Administration Crossing Inventory, 2021; summarized by Fehr & Peers, 2022.

## Planned Transportation Network Changes

Changes are planned for various transportation modes in the Project vicinity, as described in this section. These are changes that are not related to the Project and would be implemented regardless of the Project. Changes that have environmental clearance and funding are assumed in the analysis of cumulative conditions in this EIR. Changes lacking final design, full approval, and/or full funding are not considered reasonably foreseeable, and therefore are not assumed in the analysis of future conditions. Planned changes by travel mode are summarized below.

### *Fruitvale Alive! Project*

The City of Oakland's *Fruitvale Alive!* safety project includes various bicycle and pedestrian improvements along the Fruitvale Avenue corridor between East 12th Street and Alameda Avenue. The project would primarily consist of installing elevated Class 4 separated bike lanes in both directions of Fruitvale Avenue between the sidewalks and the automobile lanes by eliminating one through automobile lane. The project would also widen sidewalks, improve pedestrian crossings, add pedestrian-scale lighting along the corridor, and install new bus stops on both directions of Fruitvale Avenue at the intersection with Alameda Avenue. The *Fruitvale Alive!* project is assumed in this EIR analysis because it is designed, funded and construction started in fall 2022.

### *Fruitvale Bridge Land Crossing Project*

The City of Oakland's *Fruitvale Bridge Land Crossing* project would complete the existing gap in the Bay Trail between Fruitvale Avenue and Lancaster Street as a Class 1 path along the

Estuary. This new segment of the Bay Trail would be accessed from the Fruitvale Avenue/ Alameda Avenue intersection. The project is assumed in this EIR analysis because it is designed, funded and construction is scheduled to start in the first quarter of 2024.

#### *42nd Avenue & High Street I-880 Access Improvements*

The project would extend 42nd Avenue from its current terminus at I-880 southbound off-ramp/ Oakport Street south to Alameda Avenue, reconfigure the High Street/Oakport Street intersection, and include associated signal, pedestrian, and bicycle improvements in the area. The project would complement the already completed I-880/High Street Interchange improvement project and would improve traffic congestion along High Street and Alameda Avenue and improve traffic access to and from I-880. The project is assumed in this EIR analysis because it is designed, funded and construction is scheduled to start in 2025.

## 4.6.3 Regulatory Setting

This section outlines the existing plans, policies, and regulations that relate and apply to the Project at the State, regional, and local levels.

### State

#### *Senate Bill 743*

On September 27, 2013, SB 743 was signed into law, building on legislative changes from SB 375, Assembly Bill (AB) 32, and AB 1358. SB 743 began the process to modify how impacts to the transportation system are assessed for purposes of CEQA compliance. SB 743 created a shift in transportation impact analysis under CEQA from a focus on automobile delay, as measured by LOS and similar metrics, toward a focus on reducing VMT.

SB 743 also includes amendments that revise the definition of "infill opportunity zones" to allow cities and counties to opt out of traditional LOS standards established by CMPs and requires the Governor's Office of Planning and Research (OPR) to update the State CEQA Guidelines and establish criteria for determining the significance of transportation impacts. The statute states that upon certification of the new criteria, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment under CEQA, except in certain locations specifically identified in the new criteria.

The new criteria, contained in State CEQA Guidelines Section 15064.3, were certified and adopted in December 2018. Section 15064.3 states that VMT is the most appropriate metric to assess transportation impacts and that, with limited exceptions, a project's effect on automobile delay does not constitute a significant environmental impact.

State CEQA Guidelines Section 15064.3 provides that a lead agency may elect to be governed by the new provisions immediately, and that the provisions will apply statewide beginning on July 1,

2020. On September 21, 2016, the City of Oakland Planning Commission updated Oakland's CEQA Thresholds of Significance Guidelines aligning with SB 743.

## Regional

### *Alameda County Transportation Commission Congestion Management Program*

The Alameda County Transportation Commission (CTC) is a joint powers authority that plans, funds, and delivers transportation programs and projects that expand access and improve mobility to foster a vibrant and livable Alameda County. Alameda CTC also serves as the County's congestion management agency. The Alameda CTC administers a Land Use Analysis Program, which is one of the legislatively required elements of the Alameda CTC Congestion Management Program (Alameda CTC, 2021). The goals of the Land Use Analysis Program are to:

- Better integrate local land use and regional transportation investment decisions.
- Better assess the impacts of development in one community on another community.
- Promote information sharing between local governments when the decisions made by one jurisdiction will impact another.

Alameda CTC guidelines state that impacts to all modes should be considered:

- *Transit*: Effects of vehicle traffic on mixed-flow transit operations, transit capacity, transit access/egress, need for future transit service, consistency with adopted plans and circulation element needs.
- *Bicycles*: Effects of vehicle traffic on bicyclist conditions, site development and roadway improvements, and consistency with adopted plans.
- *Pedestrians*: Effects of vehicle traffic on pedestrian conditions, site development and roadway improvements, and consistency with adopted plans.
- *Other impacts and opportunities*: Noise impacts for projects near State highway facilities and opportunities to environmentally clear access improvements for transit-oriented development projects.

## Local

### *City of Oakland General Plan*

The Oakland General Plan comprises numerous elements, and those containing policies relevant to transportation resources are contained primarily in the Land Use and Transportation Element (LUTE). The goals and policies contained in the various General Plan Elements are often competing. In reviewing a project for conformity with the General Plan, the City is required to balance the competing goals and policies. This Project is reviewed for compliance with the following local plans and policies:

- General Plan LUTE.

- City of Oakland 2017 Pedestrian Master Plan, *Oakland Walks!* (incorporated into the City's General Plan)
- City of Oakland 2019 Bicycle Master Plan, *Let's Bike Oakland!* (incorporated into the City's General Plan)
- City of Oakland Public Transit and Alternative Modes Policy
- City of Oakland Complete Streets Policy
- City of Oakland 2020 Equitable Climate Action Plan
- City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards

The General Plan is a comprehensive plan for the growth and development of the City. The General Plan includes policies related to land use and circulation; housing; recreation; conservation and open space; noise; environmental hazards; and historic resources. These topics are addressed within individual elements of the General Plan: Land Use and Transportation; Pedestrian Master Plan; Bicycle Master Plan; Housing; Historic Preservation; Open Space; Conservation; Recreation; Noise; and Safety. Each is addressed separately below.

Regarding a project's consistency with the General Plan in the context of CEQA, the General Plan states the following:

> *The General Plan contains many policies which may in some cases address different goals, policies, and objectives and thus some policies may compete. The Planning Commission and City Council, in deciding whether to approve a proposed project, must decide whether, on balance, the project is consistent (i.e., in general harmony) with the General Plan. The fact that a specific project does not meet all General Plan goals, policies and objectives does not inherently result in a significant effect on the environment within the context of CEQA.*[2]

### Land Use and Transportation Element

The City of Oakland, through various policy documents, states a strong preference for encouraging use of pedestrian, bicycle, and transit travel modes. The following policies are included in the LUTE (City of Oakland, 1998):

> ***LUTE Policy Framework: Encouraging Alternative Means of Transportation.*** "A key challenge for Oakland is to encourage commuters to carpool or use alternative modes of transportation, including bicycling or walking. The Policy Framework proposes that congestion be lessened by promoting alternative means of transportation, such as transit, biking, and walking, providing facilities that support alternative modes, and implementing street improvements. The City will continue to work closely with local and regional transit providers to increase accessibility to transit and improve intermodal transportation connections and facilities. Additionally, policies support the introduction of light rail and trolley buses along appropriate arterials in heavily traveled corridors, and expanded use of ferries in the bay and estuary."

[2] City Council Resolution No. 79312 C.M.S.; adopted June 2005.

***Policy T3.5: Including Bikeways and Pedestrian Walks.*** The City should include bikeways and pedestrian walks in the planning of new, reconstructed, or realized streets, wherever possible.

***Policy T3.6: Encouraging Transit.*** The City should encourage and promote use of public transit in Oakland by expediting the movement of and access to transit vehicles on designated "transit streets" as shown on the Transportation Plan. (Policies T3.6 and T3.7 are based on the City Council's passage of a "Transit First" policy in October 1996.)

***Policy T3.7: Resolving Transportation Conflicts.*** The City, in constructing and maintaining its transportation infrastructure, should resolve any conflicts between public transit and single occupant vehicles in favor of the transportation mode that has the potential to provide the greatest mobility and access for people, rather than vehicles, giving due consideration to the environmental, public safety, economic development, health and social equity impacts.

***Policy T4.1: Incorporating Design Features for Alternative Travel.*** The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage use of alternative modes of transportation such as transit, bicycling, and walking.

The City of Oakland is currently in the process of updating the General Plan and LUTE. However, the approved 1998 LUTE continues to be applicable to the Project.

### 2017 Pedestrian Master Plan

Oakland's Pedestrian Master Plan, *Oakland Walks!* was adopted June 27, 2017 and identifies policies and implementation measures that promote a walkable city. The plan's vision is built around four pillars – Safety, Equity, Responsiveness, and Vitality (City of Oakland, 2017):

- **Holistic Community Safety –** Make Oakland's pedestrian environment safe and welcoming.
- **Equity –** Recognizing a historical pattern of disinvestment, focus investment and resources to create equitable, accessible walking conditions to meet the needs of Oakland's diverse communities.
- **Responsiveness –** Develop and provide tools to ensure that Oakland creates and maintains a vibrant pedestrian environment.
- **Vitality –** Ensure that Oakland's pedestrian environment is welcoming, well connected, supports the local economy, and sustains healthy communities.

Within these four pillars *Oakland Walks!* strives for five outcomes and within each are several actions.

- **Outcome 1 Increase Pedestrian Safety** – There are ten actions within this outcome. The City will install pedestrian safety improvements in high injury corridors, develop new policies, adopt Vision Zero, upgrade signals and other infrastructure, work to reduce vehicle speeds, improve lighting, and explore ways to equitably enforce traffic laws.
- **Outcome 2 Create Streets and Places that Promote Walking** – There are nine actions within this outcome. The City will integrate safety into the design of new streets, incorporate

art into pedestrian infrastructure, plant more street trees, repair sidewalks, install accessible curb ramps and other features to improve the pedestrian environment for vulnerable populations, and provide public open space in underutilized roadways. The City will also pursue citywide programs and partnerships with nonprofits and community groups to promote walking.

- **Outcome 3 Improve Walkability to Key Destinations** – There are six actions within this outcome. The City will develop a prioritization strategy to best focus the benefits of the Safe Routes to School program, establish a similar program focused on first and last mile access to transit, support wayfinding efforts that can be used by vulnerable populations, and identify strategies for improving the walking environment in and near Caltrans-owned rights-of-way, such as underneath freeway overpasses, on and off ramps, and streets where the surface grade is un-even due to railroad tracks. Additionally, the City will use Walk Score® to improve walkability to key destinations and to enhance areas where car-ownership and usage is lower than the citywide average.

- **Outcome 4 Engage the Oakland Community in Creating Vibrant Pedestrian Environments** – There are five actions within this outcome. The City will reinvigorate existing communication methods and establish new protocols for engaging about pedestrian projects and enabling community-determined pedestrian projects. The City will also partner with groups that specialize in addressing specific vulnerable populations, for example, the Mayor's Commission on Persons with Disabilities, to understand to the experiences of persons with disabilities.

- **Outcome 5 Improve Metrics, Evaluations, Funding, and Tools for Creating Pedestrian Environments** – There are nine actions within this outcome. The City will develop and implement a host of data collection, data analysis, and data reporting efforts, as well as ensure adequate staff training in pedestrian design standards to ensure that the Plan implementation is efficient, accountable, effective, and equitably distributed.

### 2019 Bicycle Master Plan

The Oakland City Council adopted the Let's Bike Oakland Plan on July 9, 2019 and adoption incorporated the plan into the adopted General Plan. The adopted plan includes four main goals regarding access, health and safety, affordability, and collaboration. Each goal outlines specific objectives and actions related to the goal. The following actions are applicable to the Project (City of Oakland, 2019b):

**Access Goal, Objective A:** Increase access to jobs, education, retail, park and libraries, schools, recreational centers, transit, and other neighborhood destinations

***Action A1:*** Build low-stress facilities that provide access to local destinations in every neighborhood in Oakland

***Action A2:*** Increase the supply of bicycle parking at neighborhood destinations like schools, medical centers, grocery stores, and government offices

***Action A3*****:** Evaluate the potential to combine transportation-impact fees for new developments within the same neighborhood to provide continuous, high-quality bicycle facilities

**Access Goal, Objective C:** Support public transit service

***Action C1:*** Design bikeways that provide first and last mile connections to transit

***Action C3:*** Install more secure, long-term bicycle parking at Oakland's BART stations, Amtrak stations, transit center and ferry terminal

**Access Goal, Objective F:** Serve people with disabilities

***Action F1:*** Ensure that bikeway designs do not create additional barriers for people with disabilities

**Health & Safety Goal, Objective C:** Reduce air pollution, asthma rates and greenhouse gas emissions

***Action C1:*** Build a bicycle network that encourages Oaklanders to choose modes of transportation other than driving by providing low-stress facilities and integrating bikes with transit

***Action C2:*** Achieve a 20 percent reduction in vehicle miles traveled annually as residents, workers and visitors meet daily needs by walking, bicycling, and using transit, consistent with the City's Energy and Climate Action Plan (2018)

**Affordability Goal, Objective A:** Reduce the overall household costs for all Oaklanders

***Action A1:*** Build a bicycle network that provides low-stress bicycle facilities for people in low-income neighborhoods, encouraging the use of bicycling as low-cost transportation

***Action A2:*** Build bikeways that provide first and last mile connections to public transit stations and major bus stops

**Affordability Goal, Objective B:** Reduce long-term transportation costs by reducing the need for vehicle ownership or for parking in new developments

***Action B1:*** Update the Oakland Planning Code to eliminate parking minimums

***Action B2:*** Revise the menu of Transportation Demand Management options to include bike share passes, fix-it stations and hydration stations

***Action B3:*** Update Oakland's Bicycle Parking Ordinance to determine whether it reflects the type and quantity of parking needed in new developments and major renovations

***Action B4:*** Update the Oakland Planning Code to require end-of-trip facilities such as showers and changing rooms in major non-residential developments

### *City of Oakland Public Transit and Alternative Modes Policy*

The City of Oakland adopted the Public Transit and Alternative Modes Policy, also known as the "Transit-First Policy," in October 2006 (City Council Resolution 73036 C.M.S.). This resolution supports public transit and other alternatives to single occupant vehicles and directs the LUTE to incorporate "various methods of expediting transit services on designated streets and encouraging greater transit use." The resolution also directs the City, in constructing and maintaining its transportation infrastructure, to resolve any conflicts between public transit and single occupant

vehicles on City streets in favor of the transportation mode that provides the greatest mobility for people rather than vehicles giving due consideration to the environment, public safety, economic development, health, and social equity impacts.

### *City of Oakland Complete Streets Policy*

The City of Oakland adopted the Complete Streets Policy to Further Ensure that Oakland Streets Provide Safe and Convenient Travel Options for all Users in January 2013 (City Council Resolution 84204 C.M.S.). This resolution, consistent with the California Complete Streets Act of 2008, directs the City of Oakland to plan, design, construct, operate, and maintain the street network in the City to accommodate safe, convenient, comfortable travel for all modes, including pedestrians, bicyclists, transit users, motorists, trucks, and emergency vehicles (City of Oakland, 2013).

### *Central Estuary Area Plan*

The City of Oakland Central Estuary Area Plan (CEAP) was developed to provide recommendations related to land use, development, urban design, shoreline access, public spaces, regional circulation and local street improvements for the Central Estuary region and waterfront. Since the Project is within the CEAP boundaries, the following goals outlined in the CEAP are relevant to the Project (City of Oakland, 2013):

**Objective C-1:** Improve and clarify regional access to Oakland's waterfront.

> Interchanges along the I-880 freeway should be consolidated at arterial roadways and brought up to current standards to improve access to and within the Estuary area. […] Improved freeway interchanges are currently under construction or planned at 23rd/29th Avenues and 42nd Avenue/High Street. These projects will improve local access and circulation and help reduce congestion on I-880. Additional improvements should be considered at 5th Avenue and Fruitvale Avenue.

**Objective C-2:** Establish a continuous waterfront roadway system; a safe promenade for pedestrians, bicycles, and slow-moving automobiles.

> For the most part, vehicular circulation should be accommodated on existing roadways. However, a continuous waterfront roadway system is a top priority in the Estuary Policy Plan. […] All waterfront roads should be treated (sic) with appropriate landscaping, lighting, signage, rest/overview areas, and, where appropriate, parking, and other features which provide a continuous character for pleasant driving, walking, and cycling. Waterfront roads should be slow-moving and accompanied by separate or contiguous bicycling and pedestrian paths where feasible.

**Objective C-3:** Balance through movement with local access along the waterfront.

> The concept of the waterfront roadway system, described above, aims to properly balance local access with through movements. […] Traffic-calming methods should be incorporated into roadway design throughout the study area, to ensure that vehicular movement is managed in consideration of recreational and aesthetic values. The waterfront roadway system should not become an overflow or alleviator route to the I-880 freeway; however, it will remain part of the City's heavyweight truck route.

**Objective C-4:** Strengthen local circulation connections between the Oakland neighborhoods and the waterfront.

> Specifically, emphasis should be placed on improving those connections [between the waterfront and inland neighborhoods] which already exist – Washington, Broadway, Webster, Franklin, Oak, 5th, 16th, 23rd, 29th Avenues, Fruitvale, and High Streets. These links can be strengthened through alterations of street alignments or extensions of existing roadways, relocating parking areas, and improving pedestrian facilities.

**Objective C-5:** Promote transit service to and along the waterfront.

> Land and water-based transit services should be ex-tended to and along the waterfront. Transit services should be focused along Broadway, Washington, Franklin, Third, and Fruitvale. […] High-capacity transit service between Fruitvale BART and Alameda should be studied further. […]

**Objective C-6:** Improve pedestrian and bicycle circulation.

> Bicycle and pedestrian networks should be extended throughout the waterfront. By enhancing the Embarcadero and the streets parallel to the waterfront, a continuous pedestrian path and bicycle route can be established along the waterfront. Links from the waterfront roadway system to upland neighborhoods are proposed along connecting routes, including Oak, Lake Merritt Channel, 2nd Street to 3rd Street, Fifth Street and Fifth Ave, Fruitvale, and Alameda Avenue to High Street, as well as the grid of streets in the Jack London District.

The CEAP also includes policy-level recommendations for enhancing the local street network. The following policies are relevant to the Project:

**Policy Connection C – C:** from the eastern end of Ford Street to the southwestern end of 37th Avenue. Requires right-of-way acquisition.

> Implementation of this connection would:
>
> - Provide a central connector between Fruitvale Avenue and 37th Avenue from which new development could be accessed if large-scale properties in the area were to develop in the future.

**Policy Connection F – F:** from the eastern end of Elmwood Avenue to 36th Avenue. Requires right-of-way acquisition or negotiation of an easement.

> Implementation of this connection would:
>
> - Change Elmwood Avenue and 36th Avenue from cul-de-sacs into through streets;
> - Enhance emergency access;
> - Enhance local connectivity and access.

**Policy Connection G – G:** from the southeastern end of 37th Avenue to Alameda Avenue (or Policy Connection E – E, when this is implemented). Requires right-of-way acquisition or negotiation of an easement.

> Implementation of this connection would:
>
> - Change 37th Avenue from a cul-de-sac into a through street;

- Enhance emergency access;
- Enhance local connectivity and access (if implemented prior to Policy Connection C – C);
- Provide access to new development if largescale properties in the area were to develop in the future (if implemented in conjunction with Policy Connection C – C).

### *City of Oakland Equitable Climate Action Plan*

The City of Oakland adopted the Oakland 2030 Equitable Climate Action Plan (ECAP) in July 2020 (City Council Resolution 87397 C.M.S.), a comprehensive equity-focused plan to achieve the 2030 GHG reduction target and increase Oakland's resilience to the impacts of the climate crisis. Since cars and trucks account for two-thirds of local emissions in Oakland, the ECAP has a focus on transportation and land use policies. The following actions are applicable to the Project:

**Action TLU-1:** Align All Planning Policies & Regulations with ECAP Goals and Priorities.

Remove parking minimums and establish parking maximums where feasible, ensuring public safety and accessibility.

Require transit passes bundled with all new major developments.

**Action TLU-2:** Align Permit and Project Approvals with ECAP Priorities. Amend Standard Conditions of Approval (SCAs), as well as mitigation measures and other permit conditions, to align with the City's GHG reduction priorities stated in this ECAP. Explore, through the Planning Commission, adoption of a threshold of significance for GHG impacts to align with this ECAP. In applying conditions on permits and project approvals, ensure that all cost-effective strategies to reduce GHG emissions from buildings and transportation are required or otherwise included in project designs, including infrastructure improvements like bicycle corridor enhancements, wider sidewalks, crossing improvements, public transit improvements, street trees and urban greening, and green stormwater infrastructure. Where onsite project GHG reductions are not cost-effective, prioritize local projects benefiting frontline communities.

**Action TLU-4:** Abundant, Affordable, and Accessible Public Transit. The City will work with public transit agencies to replace autos with public transit as a primary transportation mode for trips beyond walking distance, ensuring convenient, safe, and affordable public transit access within Oakland and to neighboring cities for all Oaklanders.

**Action TLU-5:** Create a Zero Emission Vehicle (ZEV) Action Plan. By 2021, develop a ZEV Action Plan to increase adoption of electric vehicles and e-mobility while addressing equity concerns and prioritizing investment in frontline communities. The plan must set ambitious targets for ZEV infrastructure and must be coordinated with other land use and mobility options so that ZEV ownership is not necessary for access to ZEV trips, and ZEVs increase as a percentage of all vehicles while overall vehicle miles traveled decreases. The plan must address the following sectors: medium and heavy-duty vehicle electrification, including trucks and delivery vehicles; personal vehicle charging infrastructure in multifamily buildings, including affordable buildings; curbside charging; school and transit buses; and coordination with private and public fleet operators.

**Action TLU-8:** Expand and Strengthen Transportation Demand Management (TDM) Requirements. Increase TDM performance requirements for new developments where

feasible to support the mode shifts necessary to achieve a low carbon transportation system. Expand the TDM program to include requirements for existing employers. Fund ongoing monitoring and enforcement of TDM requirements.

## *Standard Conditions of Approval*

The City's Standard Conditions of Approval (SCAs) that directly pertain to transportation and circulation and that apply to the Project are listed below. If the Project is adopted by the City, all applicable SCAs will be adopted as conditions of approval and required, as applicable, of the Project to help ensure no significant impacts. Because the SCAs are incorporated as part of the Project, they are not listed as mitigation measures.

**SCA TRANS-1: Construction Activity in the Public Right-of-Way (#75)**

***a. Obstruction Permit Required***

**Requirement:** The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets, sidewalks, bicycle facilities, and bus stops.

**When Required:** Prior to approval of construction-related permit

**Initial Approval:** Department of Transportation

**Monitoring/Inspection:** Department of Transportation

***b. Traffic Control Plan Required***

**Requirement:** In the event of obstructions to vehicle or bicycle travel lanes, bus stops, or sidewalks, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian accommodations (or detours, if accommodations are not feasible), including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The Traffic Control Plan shall be in conformance with the City's Supplemental Design Guidance for Accommodating Pedestrians, Bicyclists, and Bus Facilities in Construction Zones. The project applicant shall implement the approved Plan during construction.

**Initial Approval:** Department of Transportation

**Monitoring/Inspection:** Department of Transportation

***c. Repair of City Streets***

**Requirement:** The project applicant shall repair any damage to the public right-of way, including streets and sidewalks, caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately.

**When Required:** Prior to building permit final

**Initial Approval:** N/A

**Monitoring/Inspection:** Department of Transportation

**SCA TRANS-2: Bicycle Parking (#76)**

**Requirement:** The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements.

**When Required:** Prior to approval of construction-related permit

**Initial Approval:** Bureau of Planning

**Monitoring/Inspection:** Bureau of Building

**SCA TRANS-3: Transportation and Parking Demand Management (#78)**

***a. Transportation and Parking Demand Management (TDM) Plan Required***

**Requirement:** The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City.

i. The goals of the TDM Plan shall be the following:

- Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable.
- Achieve the following project vehicle trip reductions (VTR):
  - Projects generating 50 to 99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR
  - Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR
- Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate.
- Enhance the City's transportation system, consistent with City policies and programs.

ii. The TDM Plan should include the following:

- Baseline existing conditions of parking and curbside regulations within the surrounding neighborhood that could affect the effectiveness of TDM strategies, including inventory of parking spaces and occupancy if applicable.
- Proposed TDM strategies to achieve VTR goals (see below).

iii. For employers with 100 or more employees at the subject site, the TDM Plan shall also comply with the requirements of Oakland Municipal Code Chapter 10.68 Employer-Based Trip Reduction Program.

iv. The following TDM strategies must be incorporated into a TDM Plan based on a project location or other characteristics. When required, these mandatory strategies should be identified as a credit toward a project's VTR.

| Improvement | Required by code or when … |
|---|---|
| Bus boarding bulbs or islands | • A bus boarding bulb or island does not already exist, and a bus stop is located along the project frontage; and/or<br>• A bus stop along the project frontage serves a route with 15 minutes or better peak hour service and has a shared bus-bike lane curb |
| Bus shelter | • A stop with no shelter is located within the project frontage; or<br>• The project is located within 0.10 miles of a flag stop with 25 or more boardings per day |
| Concrete bus pad | • A bus stop is located along the project frontage and a concrete bus pad does not already exist |
| Curb extensions or bulb-outs | • Identified as an improvement within site analysis |
| Implementation of a corridor-level bikeway improvement | • A buffered Class II or Class IV bikeway facility is in a local or county adopted plan within 0.10 miles of the project location; and<br>• The project would generate 500 or more daily bicycle trips |
| Implementation of a corridor-level transit capital improvement | • A high-quality transit facility is in a local or county adopted plan within 0.25 miles of the project location; and<br>• The project would generate 400 or more peak period transit trips |
| Installation of amenities such as lighting; pedestrian-oriented green infrastructure, trees, or other greening landscape; and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan. | • Always required |
| Installation of safety improvements identified in the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) | • When improvements are identified in the Pedestrian Master Plan along project frontage or at an adjacent intersection |
| In-street bicycle corral | • A project includes more than 10,000 square feet of ground floor retail, is located along a Tier 1 bikeway, and on-street vehicle parking is provided along the project frontages. |

| Improvement | Required by code or when … |
|---|---|
| Intersection improvements[3] | • Identified as an improvement within site analysis |
| New sidewalk, curb ramps, curb and gutter meeting current City and ADA standards | • Always required |
| No monthly permits and establish minimum price floor for public parking[4] | • If proposed parking ratio exceeds 1:1000 sf. (commercial) |
| Parking garage is designed with retrofit capability | • Optional if proposed parking ratio exceeds 1:1.25 (residential) or 1:1000 sf. (commercial) |
| Parking space reserved for car share | • If a project is providing parking and a project is located within downtown. One car share space reserved for buildings between 50 – 200 units, then one car share space per 200 units. |
| Paving, lane striping or restriping (vehicle and bicycle), and signs to midpoint of street section | • Typically required |
| Pedestrian crossing improvements | • Identified as an improvement within site analysis |
| Pedestrian-supportive signal changes[5] | • Identified as an improvement within operations analysis |
| Real-time transit information system | • A project frontage block includes a bus stop or BART station and is along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better |
| Relocating bus stops to far side | • A project is located within 0.10 mile of any active bus stop that is currently near-side |
| Signal upgrades[6] | • Project size exceeds 100 residential units, 80,000 sf. of retail, or 100,000 sf. of commercial; and<br>• Project frontage abuts an intersection with signal infrastructure older than 15 years |

3 Including but not limited to visibility improvements, shortening corner radii, pedestrian safety islands, accounting for pedestrian desire lines.

4 May also provide a cash incentive or transit pass alternative to a free parking space in commercial properties.

5 Including but not limited to reducing signal cycle lengths to less than 90 seconds to avoid pedestrian crossings against the signal, providing a leading pedestrian interval, provide a "scramble" signal phase where appropriate.

6 Including typical traffic lights, pedestrian signals, bike actuated signals, transit-only signals

| Improvement | Required by code or when … |
|---|---|
| Transit queue jumps | • Identified as a needed improvement within operations analysis of a project with frontage along a Tier 1 transit route with 2 or more routes or peak period frequency of 15 minutes or better |
| Trenching and placement of conduit for providing traffic signal interconnect | • Project size exceeds 100 units, 80,000 sf. of retail, or 100,000 sf. of commercial; and<br>• Project frontage block is identified for signal interconnect improvements as part of a planned ITS improvement; and<br>• A major transit improvement is identified within operations analysis requiring traffic signal interconnect |
| Unbundled parking | • If proposed parking ratio exceeds 1:1.25 (residential) |

v. Other TDM strategies to consider include, but are not limited to, the following:

- Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement.
- Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping.
- Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project.
- Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan, the Master Street Tree List and Tree Planting Guidelines (which can be viewed at http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak042662.pdf and http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oak025595.pdf, respectively) and any applicable streetscape plan.
- Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements.
- Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency).

- Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes.
- Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: (1) Contribution to AC Transit bus service; (2) Contribution to an existing area shuttle service; and (3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3).
- Guaranteed ride home program for employees, either through 511.org or through separate program.
- Pre-tax commuter benefits (commuter checks) for employees.
- Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants.
- On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools.
- Distribution of information concerning alternative transportation options.
- Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties.
- Parking management strategies including attendant/valet parking and shared parking spaces.
- Requiring tenants to provide opportunities and the ability to work off-site.
- Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week).
- Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours.

The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.

**When Required:** Prior to approval of planning application.

**Initial Approval:** Bureau of Planning

**Monitoring/Inspection:** N/A

*b. TDM Implementation – Physical Improvements*

**Requirement:** For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project.

**When Required:** Prior to building permit final

**Initial Approval:** Bureau of Building

**Monitoring/Inspection:** Bureau of Building

*c. TDM Implementation – Operational Strategies*

**Requirement:** For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.

**When Required:** Ongoing

**Initial Approval:** Department of Transportation

**Monitoring/Inspection:** Department of Transportation

**SCA TRANS-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure (#81)**

*a. PEV-Ready Parking Spaces*

**Requirement:** The applicant shall submit, for review and approval of the Building Official and the Zoning Manager, plans that show the location of parking spaces equipped with full electrical circuits designated for future PEV charging (i.e., "PEV-Ready) per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-Ready parking spaces.

**When Required:** Prior to Issuance of Building Permit

**Initial Approval:** Bureau of Building

**Monitoring/Inspection:** Bureau of Building

*b. PEV-Capable Parking Spaces*

**Requirement:** The applicant shall submit, for review and approval of the Building Official, plans that show the location of inaccessible conduit to supply PEV-capable

parking spaces per the requirements of Chapter 15.04 of the Oakland Municipal Code. Building electrical plans shall indicate sufficient electrical capacity to supply the required PEV-capable parking spaces.

**When Required:** Prior to Issuance of Building Permit

**Initial Approval:** Bureau of Building

**Monitoring/Inspection:** Bureau of Building

*c. ADA-Accessible Spaces*

**Requirement:** The applicant shall submit, for review and approval of the Building Official, plans that show the location of future accessible EV parking spaces as required under Title 24 Chapter 11B Table 11B-228.3.2.1, and specify plans to construct all future accessible EV parking spaces with appropriate grade, vertical clearance, and accessible path of travel to allow installation of accessible EV charging station(s).

**When Required:** Prior to Issuance of Building Permit

**Initial Approval:** Bureau of Building

**Monitoring/Inspection:** Bureau of Building

**SCA TRANS-5: Transportation Improvements (#77)**

**Requirement:** The project applicant shall implement the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Review for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, transportation demand management measures, and transit, pedestrian, and bicyclist amenities). The project applicant is responsible for funding and installing the improvements and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for improvements related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for, among other items, the elements listed below:

a. 2070L Type Controller with cabinet accessory
b. GPS communication (clock)
c. Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile)
d. Countdown pedestrian head module switch out
e. City Standard ADA wheelchair ramps

f. Video detection on existing (or new, if required)
g. Mast arm poles, full activation (where applicable)
h. Polara Push buttons (full activation)
i. Bicycle detection (full activation)
j. Pull boxes
k. Signal interconnect and communication with trenching (where applicable), or through existing conduit (where applicable), 600 feet maximum
l. Conduit replacement contingency
m. Fiber switch
n. PTZ camera (where applicable)
o. Transit Signal Priority (TSP) equipment consistent with other signals along corridor
p. Signal timing plans for the signals in the coordination group
q. Bi-directional curb ramps (where feasible, and if project is on a street corner)
r. Upgrade ramps on receiving curb (where feasible, and if project is on a street corner)

**When Required:** Prior to building permit final or as otherwise specified

**Initial Approval:** Bureau of Building; Department of Transportation

**Monitoring/Inspection:** Bureau of Building

**SCA TRANS-6: Transportation Impact Fee (#79)**

**Requirement:** The project applicant shall comply with the requirements of the City of Oakland Transportation Impact Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).

**When Required:** Prior to issuance of building permit

**Initial Approval:** Bureau of Building

**Monitoring/Inspection:** N/A

### *Transportation Impact Review Guidelines (TIRG)*

On September 21, 2016, the City of Oakland's Planning Commission directed staff to update the City of Oakland's CEQA Thresholds of Significance Guidelines related to transportation impacts in order to implement the directive from SB 743 to modify local environmental review processes by removing automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, as a significant impact on the environment pursuant to CEQA. The Planning Commission direction aligns with the December 2018 guidance from the Governor's Office of Planning and Research and the City's approach to transportation impact analysis with adopted plans and policies related to transportation, which promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses.

Consistent with Planning Commission direction and SB 743 requirements, the City of Oakland published its revised TIRG in 2017 to guide the evaluation of the transportation impacts associated with land use development projects.

The City of Oakland's TIRG provides direction on the scope of the study that the City of Oakland requires in evaluating the potential transportation impact of proposed land use development projects. The TIRG ensures that potentially significant impacts are studied according to the City's thresholds of significance under CEQA. The Guidelines also provide direction on appropriate mitigations for significant impacts in the context of the overall policies and objectives of the City.

## 4.6.4 Environmental Impacts and Mitigation Measures

### Project Transportation Characteristics

This section discusses various characteristics of the Project, also described in Chapter 3, *Project Description*, that affect transportation and circulation.

#### *Proposed Project*

The Project is located at the northeast corner of the Alameda Avenue/Fruitvale Avenue intersection in Oakland. The 23.9-acre site is currently occupied by several vacant buildings totaling 1.24 million square feet, which the Project would demolish. The Project would construct a single building providing approximately 430,000 square feet of space. The end user and nature of the use is unknown at this time but, for the purposes of this analysis, is assumed to be a distribution warehouse facility.

The Project would provide 295 passenger vehicle parking spaces in a surface parking lot primarily on the north and west sides of the Project site. The Project would also accommodate 228 trailer stalls and 48 loading docks on the south side of the Project site.

Automobile access to the Project site would be provided via five driveways: one driveway on Fruitvale Avenue opposite East 7th Street which would be limited to rights-in and rights-out only on Fruitvale Avenue, and one driveway on Boehmer Street opposite 34th Avenue, each limited to passenger vehicles, two driveways on 37th Avenue, the north one would be limited to passenger vehicles, and one driveway on Alameda Avenue. Trucks would access the site via the south driveway on 37th Avenue and the driveway on Alameda Avenue.

An approximately one-acre parcel on the southeast corner of the site, at the Alameda Avenue/ 37th Avenue intersection, may be developed as retail and/or restaurant in the future. This analysis assumed that the site would be developed as a 10,000 square foot restaurant or café.

### *Proposed Roadway Network Changes*

The Project proposes several changes to the adjacent roadway network that are currently under design and subject to approval by the City of Oakland. The proposed changes include the following:

- Open Boehmer Street, which extends between 36th and 37th Avenues and is currently closed and gated, as a public street. Boehmer Street would be a 26-foot curb-to-curb street with a 5.5-foot sidewalk on the north side and a 7.5-foot sidewalk on the south side. The street would accommodate one travel lane in each direction and parking on one side of the street.
- Extend 37th Avenue from the current cul-de-sac south of Boehmer Street to Alameda Avenue along the east side of the Project site. The 37th Avenue extension would be approximately 31 to 33-foot curb-to-curb street with a minimum 5.5-foot sidewalk on the east and a six-foot sidewalk on the west side of the street, matching the existing segment of 37th Avenue. The street would accommodate one travel lane in each direction and parking on one side of the street.
- Relocate Alameda Avenue approximately 100-feet to the north, reducing the existing curvature of the roadway and creating space for expanded public access to the Oakland Estuary. The street would generally provide 54 feet curb-to-curb with a 6.5-foot landscape buffer and 5.5-foot sidewalk on the north side of the street and a 7.5-foot landscape buffer, eight-foot sidewalk, up to 28-foot landscape area, and a 12-foot Class I shared-used path on the south side of the street adjacent to the Estuary, which would be part of the San Francisco Bay Trail. Along the Project frontage, the roadway would accommodate two westbound travel lanes and one eastbound travel lane with parallel on-street parking on the north side of the street between the Project driveway and 37th Avenue. The roadway would also provide Class 2B buffered bicycle lanes in both directions.

### *Project Automobile Trip Generation*

Trip generation is the process of estimating the number of vehicles that would likely access the Project on a typical weekday. **Table 4.6-3** summarizes the trip generation for the Project assuming that the industrial component of the Project would be developed as a distribution warehouse. The Project is estimated to generate 2,130 daily, 305 AM peak hour, and 243 PM peak hour trips on a typical weekday.

**TABLE 4.6-3**
**PROJECT VEHICLE TRIP GENERATION SUMMARY**

| Project[a] | Daily | Weekday AM Peak Hour | | | Weekday PM Peak Hour | | |
|---|---|---|---|---|---|---|---|
| | | In | Out | Total | In | Out | Total |
| Industrial Distribution Warehouse (High-Cube Parcel Hub Warehouse) | 1,600 | 123 | 121 | **244** | 143 | 67 | **210** |
| Commercial (Restaurant) | 530 | 34 | 27 | **61** | 20 | 13 | **33** |
| **Total** | **2,130** | **157** | **148** | **305** | **163** | **80** | **243** |

NOTES:

[a] See Appendix J for detailed calculations.

SOURCE: Fehr & Peers, 2023.

Appendix J, Transportation Impact Review (non-CEQA) Memorandum, provides the detailed trip generation calculations and assumptions.

Trip generation data published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual (11th Edition)* is used as a starting point to estimate the vehicle trip generation. The ITE data is primarily based on data collected at single-use suburban sites where the automobile is often the only travel mode. However, the Project site is in a medium density mixed-use environment adjacent to frequent bus service where many trips are walk, bike, or transit trips. Since the Project site is about a 0.6-mile walking distance from the Fruitvale BART Station, this analysis reduces the ITE based trip generation by about 37 percent to account for non-automobile trips. This reduction is consistent with the City of Oakland's Transportation Impact Review Guidelines (TIRG) and is based on US Census commute data for Alameda County from the 2014 5-Year Estimates of the American Community Survey (ACS), which shows that the non-automobile mode share for urban areas between 0.5 and one mile of a BART station is approximately 37 percent.

The Project trip generation estimate also accounts for the truck trip generation rates for the use as published in the ITE Trip Generation Manual. Since trucks are larger and operate slower than passenger vehicles, a passenger car equivalent (PCE) ratio of 2.0 is used to convert the truck trips to passenger vehicle trips (each truck is counted as two passenger vehicles).

The trip generation estimate summarized in Table 4.6-3 does not account for the TDM Plan required by CITY SCA TRANS-3 (provided in Appendix K), which is required to reduce the passenger car trips generated by the Project by at least 20 percent.

### *Non-Automobile Trip Generation*

Consistent with the City of Oakland's TIRG, **Table 4.6-4** presents the trip generation estimates for all travel modes for both the industrial and commercial components of the Project combined.

**TABLE 4.6-4**
**TRIP GENERATION BY TRAVEL MODE**

| Travel Mode | Mode Share Adjustment Factors[a] | Daily | Weekday AM Peak Hour | Weekday PM Peak Hour |
|---|---|---|---|---|
| Passenger Vehicles | 0.633 | 1,630 | 227 | 191 |
| Trucks | N/A[b] | 500 | 78 | 52 |
| Transit | 0.236 | 610 | 80 | 70 |
| Bike | 0.049 | 130 | 20 | 10 |
| Walk | 0.062 | 160 | 20 | 20 |
| **Total Trips** | | **3,250** | **430** | **385** |

NOTES:
[a] Based on the City's *Transportation Impact Review Guidelines*, assuming the Project site is in an urban environment between 0.5 and 1.0 mile from a BART station, ferry terminal, or rail station.
[b] Truck trips in PCE. See Appendix J for detailed calculations.

SOURCE: Fehr & Peers, 2023.

## Significance Criteria

The following thresholds are consistent with OPR guidance and with the City's *TIRG*. The Project would have a significant impact on the environment if it would:

1. Cause substantial additional VMT per capita, per service population, or other appropriate efficiency measure. Specifically,
    - For residential uses, a project would cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15 percent.
    - For office uses, a project would cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15 percent.
    - For retail uses, a project would cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15 percent.
2. Conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay).
3. Substantially induce additional automobile travel by increasing physical roadway capacity in congested areas i.e., adding new mixed-flow lanes or adding new roadways to the network.

## Approach to Analysis

Many factors affect travel behavior, including density of development, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management. Typically, low-density development that is located at a great distance from other land uses and in areas with poor access to non-single occupancy vehicle travel modes, generates more automobile travel compared to development located in urban areas, where a higher density of development, a mix of land uses, and travel options other than private vehicles are available.

Given these travel behavior factors, most of Oakland has lower VMT per capita and VMT per worker ratios than the nine-county San Francisco Bay Area region. Further, within the City of Oakland, some neighborhoods may have lower VMT ratios than others.

### *VMT Estimate Approach*

Estimating VMT requires the use of travel demand models to fully capture the length of trips on the transportation network as well as the changes in VMT behavior that may occur with the introduction of the Project. This analysis uses two travel demand models to analyze the VMT impacts of the Project. The VMT screening analysis for the Project uses the MTC Travel Model while the detailed VMT analysis for the Project uses the Alameda CTC Countywide Travel Demand Model. The following describes how the two models estimate VMT.

#### MTC Travel Model

Neighborhoods within Oakland are expressed geographically in transportation analysis zones, or TAZs. The MTC Travel Model includes approximately 120 TAZs within Oakland that vary in

size from a few city blocks in the downtown core, to multiple blocks in outer neighborhoods, to even larger geographic areas in lower density areas in the hills. TAZs are used in transportation planning models for transportation analysis and other planning purposes.

The MTC Travel model assigns all predicted trips within, across, to or from the nine-county San Francisco Bay Area region on the roadway network and the transit system, by mode (single-driver and carpool vehicle, biking, walking, or transit) and transit carrier (bus, rail) for a given development and network scenario.

The travel behavior from MTC Travel Model is modeled based on the following inputs:

- Socioeconomic data developed by the Association of Bay Area Governments.
- Population data created using 2000 U.S. Census and modified using the open source PopSyn software.
- Zonal accessibility measurements for destinations of interest.
- Travel characteristics and automobile ownership rates derived from the 2000 Bay Area Travel Survey.
- Observed vehicle counts and transit boardings.

The daily VMT output from the MTC Travel Model for residential and commercial uses comes from a tour-based analysis. The tour-based analysis examines the entire chain of trips over the course of a day, not just trips to and from the Project site. In this way, all the VMT for an individual resident or worker is included, not just trips to and from the person's home or workplace. For example: a resident leaves her apartment in the morning, stops for coffee, and then goes to the office. In the afternoon she heads out to lunch, and then returns to the office, with a stop at the drycleaners on the way. After work she goes to the gym to work out, and then joins some friends at a restaurant for dinner before returning home. The tour-based approach would add up the total amount driven and assign the daily VMT to this resident for the total number of miles driven on the entire "tour."

Based on the MTC Travel Model, the regional average daily VMT per worker is 21.8 under 2020 conditions and 20.3 under 2040 conditions. MTC has calculated these same metrics for all the TAZs in the nine-county Bay Area (MTC, n.d.).

### Alameda CTC Travel Model

The detailed VMT evaluation for the Project is conducted using the Alameda CTC Countywide Travel Demand Model. The travel behavior forecasted by the Alameda CTC Model is based on the same inputs as described above for the MTC Model. However, the Alameda CTC Model provides increased granularity within Alameda County. For example, the MTC Model TAZ where the Project is located is represented by nine TAZs in the Alameda CTC Model. Thus, the Alameda CTC Model can better account for the Project setting and proximity to transit and provide a more refined estimate of travel behavior, including VMT, for the Project than the MTC Model. The major difference between the MTC and Alameda CTC Models is that while the MTC Model

outputs a "tour" based VMT, which as described above accounts for the distance in the entire chain of motor vehicle trips over the course of a weekday generated by a worker, the Alameda CTC Model outputs the home-work (i.e., commute) VMT per worker, which measures all of the worker commute VMT by a motor vehicle on a typical weekday between homes and workplaces.

## Project Impacts and Discussion

### *Vehicle Miles Traveled*

**Impact TRANS-1: The Project would not cause substantial additional VMT per worker. (Criterion 1) (*Less than Significant*)**

According to the City of Oakland's *TIRG*, VMT impacts would be less than significant for the Project if any of the identified screening criteria are met:

- *Criterion #1: Small Projects* – The Project generates fewer than 100 vehicle trips per day.
- *Criterion #2: Low-VMT Areas* – The Project meets map-based screening criteria by being in an area that exhibits below-threshold VMT, or 15 percent or more below the regional average.
- *Criterion #3: Near Transit Stations* – The Project is in a Transit Priority Area[7] or within a one-half mile of a Major Transit Corridor or Stop[8] and satisfies the following:
  - Has a floor area ratio (FAR) of more than 0.75.
  - Does not include more parking for use by residents, customers, or employees of the Project than other typical nearby uses, or more than required by the City (if parking minimums pertain to the site) or allowed without a conditional use permit (if minimums and/or maximums pertain to the site).
  - Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the MTC).

Although the Project would be a warehouse and is expected to generate large number of truck trips, the VMT assessment for the Project only includes the VMT generated by passenger vehicles and does not include the VMT generated by the trucks, consistent with SB743 requirements.[9] According to the City of Oakland's TIRG, warehouse use is classified as a production, distribution, and repair (PDR) use, and it should be screened by comparing the VMT

[7] According to the California Public Resource Code, a Transit Priority Area is defined as a one-half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor. Public Resources Code, § 21064.3 defines major transit stop as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of 15 minutes or less during the morning and afternoon peak commute periods. Public Resources Code, § 21155 defines a high-quality transit corridor as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

[8] "Major transit stop" is defined in CEQA Section 21064.3 as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

[9] CEQA Guidelines, section 15064.3, subdivision (a)

per worker in the TAZ to the regional average minus 15 percent. The application of the screening criteria to the Project are discussed below:

- ***Criterion 1*:** Per Table 4.6-3, the Project would generate more than 100 trips per day and therefore does not meet Criterion #1.
- ***Criterion 2*: Table 4.6-5** shows the 2020 and 2040 total VMT per worker for the TAZ 926, the TAZ in which the Project is located, as well as the applicable VMT thresholds of 15-percent below the regional average. The 2020 and 2040 estimated average daily total VMT per worker in the Project TAZ is higher than the regional averages minus 15-percent. Thus, the Project would not meet criterion #2.[10]

**TABLE 4.6-5**
**PROJECT VMT SCREENING SUMMARY**

| Geographic Area | Total VMT per Worker (2020) | Total VMT per Worker (2040) |
|---|---|---|
| Project TAZ (MTC Model TAZ 926) | 21.1 | 19.4 |
| Regional Average | 21.8 | 20.3 |
| Regional Average minus 15% (i.e., screening criterion) | 18.5 | 17.3 |
| Meet Screening Criterion? | No | No |

NOTES:
[a] MTC Model results at https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=98463b4f73ca43c5944a5c30648fd689.
SOURCE: Fehr & Peers, 2022

- ***Criterion 3*:** The nearest bus stop to the Project site is on Fruitvale Avenue at I-880, about 0.2 mile north of the Project site. The bus stop is served by AC Transit Lines 19, 51A, and O during the peak commute periods. As of March 2022, Line 51A has frequent service with 10- to 12-minute headways during peak periods. Since the bus stop is served by the same bus route at an interval less than 15 minutes during peak commute hours, this segment of Fruitvale Avenue is considered a high-frequency transit corridor, and since the Project is located less than 0.5 miles from a high-frequency transit corridor, it is in a Transit Priority Area. However, the Project would not meet this criterion because it would not meet two of the following three conditions required:
  - The Project would have a FAR of 0.42, which is below 0.75. (Not Satisfied)
  - According to the City of Oakland Municipal Code Section 17.116.090, the Project is required to provide a minimum of one parking space per 3,500 square feet of industrial space. No maximum amount of parking is specified in the Code. The Project would consist of a 429,900 square feet industrial building (Since the 30,000 square feet of office is considered an accessory part of the warehouse, the parking requirement for industrial use applies to the whole Project). Thus, the Project is required to provide 123 parking spaces and the Project would provide 295 parking spaces which is greater than the 123 parking spaces required by Code. (Not Satisfied)

[10] This analysis conservatively uses the MTC Model for screening purposes. However, the Project would meet the screening criterion #2 (Low-VMT Ares) if the Alameda CTC Model were used for this screening criterion.

– The Project is located within the Fruitvale and Dimond Areas Priority Development Area (PDA) as defined by Plan Bay Area and is therefore consistent with the region's Sustainable Communities Strategy. (Satisfied)

The industrial component of the Project would not satisfy any of the City of Oakland's VMT screening criteria and requires a detailed analysis of VMT, which is described below. The commercial component of the Project would provide about 10,000 square feet of retail/restaurant space. Since the Project would provide less than 80,000 square feet of commercial space, and consistent with the TIRG, the commercial uses are considered local-serving and presumed not to generate substantial additional VMT and would have a less-than-significant impact on VMT.

### Detailed VMT Evaluation

The detailed VMT evaluation for the Project is conducted using the Alameda CTC Travel Demand Model, which is described above. This analysis uses the latest version of the Alameda CTC Model, which was released in May 2019. Similar to the MTC Model, the Alameda CTC Model is based on the MTC Plan Bay Area 2040 (i.e., Sustainable Communities Strategy) transportation network and land uses for 2020 and 2040. The Model land use database was adjusted to include the Project workers. **Table 4.6-6** summarizes the home-work VMT estimates under 2020 and 2040 conditions as estimated by the Alameda CTC Model. The table also compares the home-work VMT per worker for the Project with the regionwide average and 15 percent below the regionwide average, which is the threshold used to determine the significance of the VMT impact.

**TABLE 4.6-6**
**PROJECT VMT ANALYSIS SUMMARY**

| Geographic Area | Home-Work VMT per Worker (2020) | Home-Work VMT per Worker (2040) |
|---|---|---|
| Proposed Project (Alameda CTC Model TAZ 315) | 12.9 | 12.6 |
| Bay Area Region Average | 18.1 | 18.2 |
| Bay Area Region Average minus 15% (i.e., threshold of significance) | 15.4 | 15.5 |
| Significant Impact? | No | No |

NOTES:
[a] MTC Model results at https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=98463b4f73ca43c5944a5c30648fd689.
SOURCE: Fehr & Peers, 2022

The home-work VMT per worker for the Project is estimated to be 12.9 under 2020 conditions and 12.6 under 2040 conditions. Both the 2020 and 2040 home-work VMT per worker for the Project would be more than 15 percent below the regionwide Bay Area average. This VMT estimate does not account for the TDM Plan (included as Appendix K) that the Project would be required to implement. Therefore, the Project has a less-than-significant impact regarding VMT.

**Mitigation:** None required.

### *Consistency with Adopted Policies, Plans, or Programs*

**Impact TRANS-2: The Project would not conflict with a plan, ordinance, or policy addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths. (Criterion 2) (*Less than Significant with SCAs*)**

The Project, including the associated SCAs and the recommendations included in the Transportation Impact Review (non-CEQA) Memorandum (Appendix J), is consistent with applicable plans, ordinances, and policies, and would not cause a significant impact by conflicting with adopted plans, ordinances, or policies addressing the safety and performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths (except for automobile level of service or other measures of vehicle delay).

The 1998 LUTE, as well as the City's Public Transit and Alternative Mode and Complete Streets policies, states a strong preference for encouraging the use of non-automobile transportation modes, such as transit, bicycling, and walking. The Project would encourage the use of non-automobile transportation modes by providing employment near the Fruitvale BART Station and adjacent to AC Transit Line 51A, which is a high-frequency transit corridor.

The Project is consistent with the City's CEAP. The Project proposes to extend 37th Avenue, which is currently a cul-de-sac just south of Boehner Street, south to Alameda Avenue. This proposed north-south connection was envisioned by the CEAP in Policy Connection G-G, which calls for extending 37th Avenue to Alameda Avenue in order to enhance emergency access and local connectivity and access.

CEAP Policy Connection C-C called for extension of Ford Street between Lancaster Street west of Fruitvale Avenue and 37th Avenue and CEAP Policy Connection F-F calls for extension of Elmwood Avenue to 36th Street. The extensions of Ford Street and Elmwood Avenue as envisioned by CEAP cannot be accommodated because they would require private property acquisition which is not available. The extension of Elmwood Avenue would require a new at-grade railroad crossing, which is not feasible. The Project initially proposed to extend East 7th Street from its current terminus at Fruitvale Avenue east to Boehmer Street, as an alternative and equivalent approach to the Policy Connection C-C since an existing at grade railroad crossing already exists. However, the extension would still require upgrades to the railroad crossing which are currently infeasible since acquisition of private property would be required to implement the improvements. Given the current infeasibility of this connection, the applicant as part of the project will include the area necessary to extend E. 7th Street eastward across the project site as a dedication to the City for public right of way, so that such connection could be made in the future as feasible.

As required by SCA TRANS-3, the Project is required to implement a TDM Plan (included as Appendix K), which consists of physical improvements and operational measures that would encourage the use of non-single occupant automobile travel modes and reduce the passenger vehicle trips generated by the Project. The TDM Plan is estimated to reduce the Project generated passenger vehicle trips by about eight to 20 percent, which is consistent with the City's SCA TRANS-3, LUTE, and Equitable Climate Action Plan. As stated in SCA TRANS-3, The Project is required to implement all the measures included in the TDM Plan, which consists of all feasible measures that would reduce the vehicle traffic generated by the Project; however, the Project will

not be considered in violation of the SCA if all the mandatory measures in the TDM Plan are implemented but the VTR goal is not achieved.

The Project is consistent with both the City's 2017 Pedestrian Master Plan and 2019 Bike Plan as it would not make major modifications to the existing pedestrian or bicycle facilities in the surrounding areas and would not adversely affect installation of future facilities. Although the Project proposes to replace the existing Class 2 bicycle lanes on Alameda Avenue along the Project frontage with Class 2B buffered bicycle lanes, a recommendation in the Transportation Impact Review (non-CEQA) Memorandum would upgrade the bicycle facilities on Alameda Avenue to Class 4 separated bikeways.

The Project would generate a large number of truck trips. **Figure 4.6-3** shows the truck routes for the truck trips to and from the Project site. All trucks would use Alameda Avenue and High Street, which are the designated truck routes in the Project vicinity. Furthermore, the Transportation Impact Review (non-CEQA) Memorandum includes recommendations, such as limiting trucks on East 8th Street to minimize trucks from using a residential street.

Overall, the Project would not conflict with adopted plans, ordinances, or policies addressing the safety and performance of the circulation system. Therefore, the Project has a less-than-significant impact regarding Consistency with Adopted Policies, Plans, or Programs.

**SCA TRANS-3: Transportation and Parking Demand Management.**

**Mitigation:** None required.

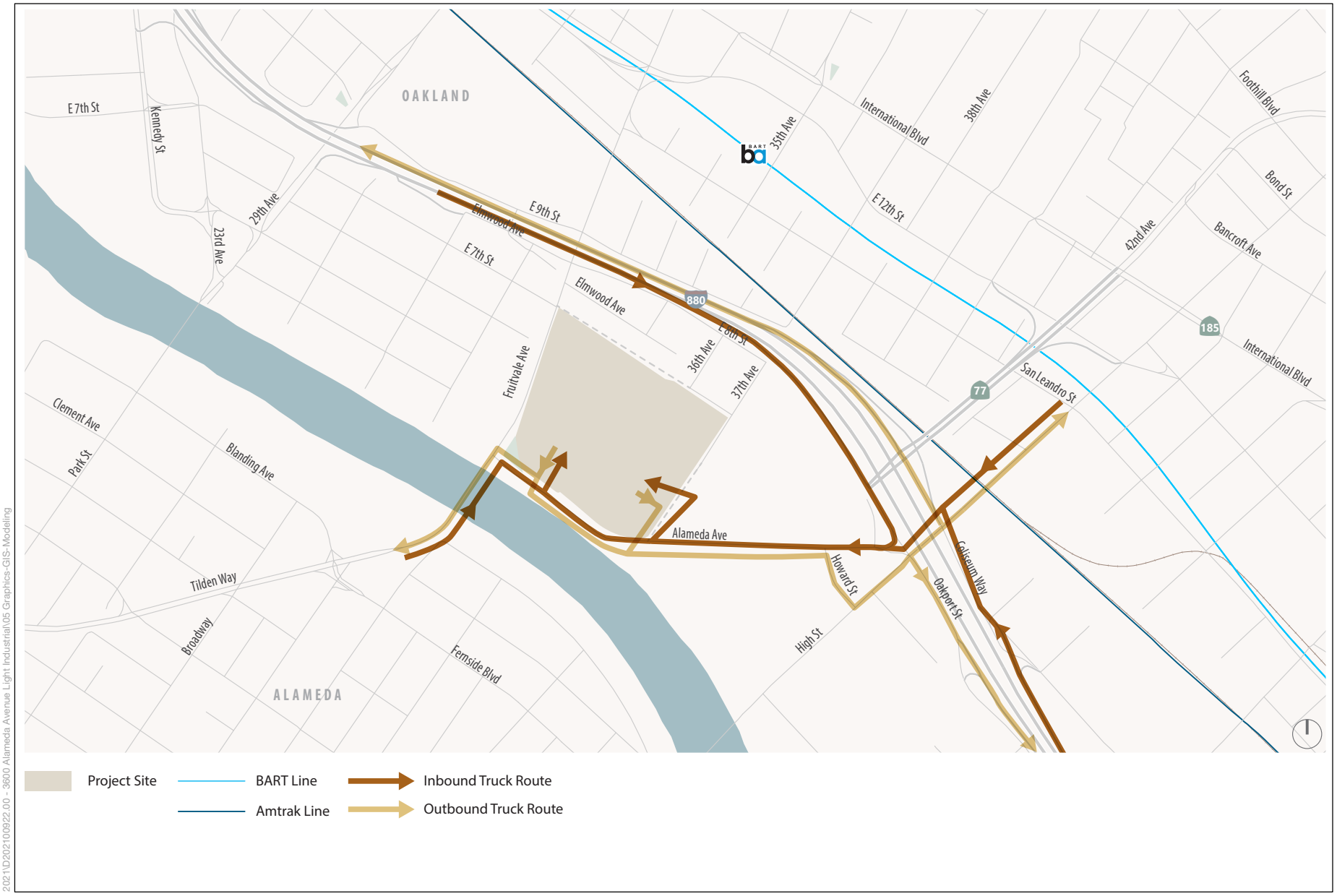
---

### *Induced Automobile Traffic*

**Impact TRANS-3: The Project would not substantially induce additional automobile travel by increasing physical roadway capacity in congested areas i.e., adding new mixed-flow lanes or adding new roadways to the network. (Criterion 3) (*Less than Significant*)**

The Project would extend 37th Avenue from the current cul-de-sac south of Boehmer Street to Alameda Avenue primarily to provide access to the Project parking facilities. This street extension is consistent with the CEAP, which envisioned providing additional east-west and north-south connections in this area in order to enhance emergency access and local connectivity and access.

As a result of this street extension, East 8th Street and 37th Avenue would also provide an alternative route for vehicles traveling between Alameda Avenue east of the Project site and Fruitvale Avenue north of the Project site or East 8th Street west of the Project site. As documented in Appendix J, Transportation Impact Review (non-CEQA) Memorandum, the Fruitvale Avenue/Alameda Avenue intersection is expected to operate with minimal delay (LOS C during both the AM and PM peak hours) after the completion of the Project; thus, motor vehicles would have little incentive to use East 8th Street and 37th Avenue. However, the Transportation Impact Review (non-CEQA) Memorandum recommends converting the 37th Avenue extension to only serve the Project site or implementing traffic calming measures on East 8th Street and 37th Avenue to disincentivize cut-through traffic on these streets.




2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: Fehr & Peers, 2022

3600 Alameda Industrial Project

**Figure 4.6-3**
Project Truck Route

ESA

Although the Project would add a new roadway to the network in the Project vicinity, the new roadway would not substantially induce additional automobile travel because it is consistent with the approved CEAP, would enhance pedestrian and bicycle connectivity, and the streets adjacent to the Project site are not considered congested. Therefore, the Project has a less-than-significant impact regarding induced automobile traffic.

**Mitigation:** None required.

---

## 4.6.5 Cumulative Impacts

**Impact TRANS-1.CU: The Project, combined with cumulative development in the Project vicinity, would not result in a cumulatively considerable transportation impact. (Criteria 1, 2, and 3) (*Less than Significant with SCAs*)**

As shown in Table 4.6-6, the Project-generated home-work VMT per worker in 2040 would be below the established threshold, and would also be a less-than-significant impact under cumulative conditions. In addition, as analyzed in the previous section, the Project would not result in a significant transportation impact by conflicting with a plan, ordinance, or policy addressing the safety or performance of the circulation system, or substantially inducing additional automobile travel by increasing capacity. Thus, the Project would not contribute to significant adverse cumulative transportation impacts when considered together with past, present, and reasonably foreseeable development.

**SCA TRANS-3: Transportation and Parking Demand Management.**

**Mitigation:** None required.

---

## 4.6.6 References

AC Transit. 2020. Ridership – Fiscal Year 2018–2019. Accessed January 18, 2022. http://www.actransit.org/about-us/facts-and-figures/ridership/.

AC Transit. 2022. AC Transit Bus Line Descriptions. January 18, 2022. Accessed January 18, 2022. http://www.actransit.org/ac-transit-bus-line-descriptions/.

Alameda County Transportation Commission (CTC). 2021. *Congestion Management Program*. October 2021. Accessed March 4, 2022. https://www.alamedactc.org/wp-content/uploads/2021/12/2021_CMP_Update_FINAL.pdf.

Bay Area Rapid Transit (BART). 2018. Monthly Ridership Reports. Accessed January 18, 2022. https://www.bart.gov/about/reports/ridership.

California Department of Transportation (Caltrans). 2019. Traffic Volumes on the State Highway System. Accessed April 1, 2022. https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/census/aadt/2019-traffic-volumes.xlsx.

City of Oakland. 1996. *Resolution Declaring the City of Oakland's Support of Public Transit and Other Alternatives to Single-Occupant Vehicles*. October 29, 1996. Accessed March 4, 2022. http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak028550.pdf.

City of Oakland. 1998. *Envision Oakland – City of Oakland General Plan Land Use and Transportation Element*. March 1998. Accessed March 4, 2022. https://www.oaklandca.gov/resources/land-use-and-transportation-element.

City of Oakland. 2013a. *Central Estuary Area Plan*. April 5, 2013. Accessed March 4, 2022. https://www.oaklandca.gov/documents/final-central-estuary-area-plan.

City of Oakland. 2013b. *Resolution Adopting a Complete Streets Policy to Further Ensure that Oakland Streets Provide Safe and Convenient Travel Options for All Users*. January 3, 2013. Accessed March 4, 2022. https://www.oaklandca.gov/documents/resolution-adopting-a-complete-streets-policy-to-further-ensure-that-oakland-streets-provide-safe-and-convenient-travel-options-for-all-users-84204-cms.

City of Oakland. 2017a. *City of Oakland Transportation Impact Review Guidelines*. April 14, 2017. Accessed March 18, 2022. https://cao-94612.s3.amazonaws.com/documents/oak063581.pdf.

City of Oakland. 2017b. *Oakland Walks! 2017 Pedestrian Plan Update*. 2017. Accessed March 6, 2022. https://www.oaklandca.gov/resources/pedestrian-plan-update.

City of Oakland. 2019. *Let's Bike Oakland, 2019 Oakland Bike Plan*. May 2019. Accessed March 6, 2022. https://www.oaklandca.gov/resources/bicycle-plan.

City of Oakland. 2020. *Equitable Climate Action Plan.* July 2020. Accessed March 4, 2022. https://cao-94612.s3.amazonaws.com/documents/Oakland-ECAP-07-24.pdf.

City of Oakland. 2021a. Fruitvale Alive! Accessed March 3, 2022. https://www.oaklandca.gov/projects/fruitvale-alive.

City of Oakland. 2021b. Oakland Truck Route Map. January 20, 2021. Accessed March 18, 2022. https://www.arcgis.com/home/webmap/viewer.html?webmap=8cd63bb6e50042d994d2e29e8308c950&extent=-122.3566,37.6323,-122.0192,37.9202.

City of Oakland. 2022a. *Waterfront Trails Update*. Accessed May 9, 2022. https://cao-94612.s3.amazonaws.com/documents/Info-Memo-Waterfront-Trails-Update.pdf.

City of Oakland. 2022b. *42nd Avenue & High Street I-880 Access Improvements*. Accessed August 29, 2022. https://www.oaklandca.gov/projects/42nd_high.

Federal Railroad Administration Office of Safety Analysis. n.d. Highway-Rail Grade Crossing Accident/Incident Reports. Accessed March 18, 2021. https://safetydata.fra.dot.gov/OfficeofSafety/publicsite/query/invdetl.aspx.

Institute of Transportation Engineers (ITE). 2021. *Trip Generation Manual, 11th Edition*. September 2021.

Metropolitan Transportation Commission (MTC). n.d. Travel Demand Model Results. Accessed October 2022. https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=98463b4f73ca43c5944a5c30648fd689.

# 4.7 Effects Not Found to Be Significant

## 4.7.1 Introduction

California Environmental Quality Act (CEQA) Guidelines Section 15128, *Effects Not Found to Be Significant*, allows environmental issues for which there is no likelihood of significant impact to be "scoped out," and not analyzed further in an EIR. This chapter presents the analysis of all topics in the CEQA Environmental Checklist (Appendix G of the CEQA Guidelines) with the following exceptions: Air Quality, Biological Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Noise, and Transportation and Circulation. These potentially significant impacts were analyzed in detail and included in Chapter 4 of this Draft EIR.

As detailed in the sections that follow, all other impacts were found to be less than significant or less than significant with implementation of SCAs. The environmental setting and baseline, Oakland thresholds of significance, environmental impacts and impact classifications described in Section 4.0, *Introduction to the Environmental Analysis*, are the same for the topic areas analyzed in this chapter. Also as described in Section 4.0, if the City determines to grant discretionary planning-related approval of the Project, all SCAs identified in this chapter would be incorporated into the Project. Therefore, all SCA's identified in this chapter are included in the Executive Summary and proposed as part of the Project to reduce potential impacts to a less than significant level.

## 4.7.2 Aesthetics, Shadow, and Wind

| *Issues (and Supporting Information Sources):* | | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| **I.** | **AESTHETICS, SHADOW, AND WIND —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) | Have a substantial adverse effect on a scenic vista;[1] | ☐ | ☐ | ☒ | ☐ |
| 2) | Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state or locally designated scenic highway; | ☐ | ☐ | ☒ | ☐ |
| 3) | Substantially degrade the existing visual character or quality of the site and its surroundings; | ☐ | ☐ | ☒ | ☐ |
| 4) | Create a new source of substantial light or glare which would substantially and adversely affect daytime or nighttime views in the area; | ☐ | ☐ | ☒ | ☐ |
| 5) | Introduce landscape that would now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code sections 25980-25986); | ☐ | ☐ | ☒ | ☐ |

[1] **NOTE**: Only impacts to scenic views enjoyed by members of the public generally (but not private views) are potentially significant.

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| 6) Cast shadow that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors; | ☐ | ☐ | ☒ | ☐ |
| 7) Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space; | ☐ | ☐ | ☒ | ☐ |
| 8) Cast shadow on an historic resource, as defined by CEQA Guidelines section 15064.5(a), such that the shadow would materially impair the resource's historic significance by materially altering those physical characteristics of the resource that convey its historical significance and that justify its inclusion on or eligibility for listing in the National Register of Historic Places, California Register of Historical Resources, Local Register of historical resources, or a historical resource survey form (DPR Form 523) with a rating of 1-5; | ☐ | ☐ | ☒ | ☐ |
| 9) Require an exception (variance) to the policies and regulations in the General Plan, Planning Code, or Uniform Building Code, and the exception causes a fundamental conflict with policies and regulations in the General Plan, Planning Code, and Uniform Building Code addressing the provision of adequate light related to appropriate uses; or | ☐ | ☐ | ☒ | ☐ |
| 10) Create winds that exceed 36 mph for more than one hour during daylight hours during the year.[2] | ☐ | ☐ | ☐ | ☒ |

## 4.7.2.1 Environmental Setting

### *Visual Resources*

The Project site is predominantly flat and is currently occupied by 1.24 million square feet of building space that previously comprised the Owens-Brockway Glass manufacturing facility. The entire site is currently developed with minimal vegetation. Given the urban nature of the Project setting, views from publicly accessible vantage points around the Project site are primarily limited to the immediate developments adjacent to the site because existing buildings generally obscure longer-range views.

Existing uses in the Project vicinity include large box industrial and commercial (e.g., retail, gym, and restaurants) developments. The area north of the site includes single-family residential uses. In addition, the site is bounded on the south by Alameda Avenue and the Oakland Estuary.

[2] **NOTE**: The wind analysis only needs to be done if the project's height is 100 feet or greater (measured to the roof) and one of the following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown. Downtown is defined in the Land Use and Transportation Element of the General Plan (page 67) as the area generally bounded by West Grand Avenue to the north, Lake Merritt and Channel Park to the east, the Oakland Estuary to the south and I-980/Brush Street to the west. The wind analysis must consider the project's contribution to wind impacts to on- and off-site public and private spaces. Only impacts to public spaces (on- and off-site) and off-site private spaces are considered CEQA impacts. Although impacts to on-site private spaces are considered a planning-related non-CEQA issue, such potential impacts still must be analyzed.

### *Light and Glare*

The Project site is in a built-out urban environment that has existing sources of light and glare typical for an urban setting. Light and glare are also associated with streetlights.

### *Shadow*

Solar panels, also known as photovoltaic solar panels, absorb sunlight as a source of energy to generate electricity. Likewise, solar thermal collectors, commonly known as solar hot water panels, turn the sun's radiation into heat and then transfer that heat into air or water. The nearest solar collectors to the Project site are approximately 315 feet northwest, at 610 Lancaster Street.

### *Public Open Spaces*

There are several public parks or open spaces in the vicinity of the Project site that are owned and managed by the Oakland Department of Parks, Recreation, and Youth Development. The Fruitvale Bridge Park is across Alameda Avenue from the Project site along the waterfront. In addition, Josie de la Cruz Park (1637 Fruitvale Avenue) and Cesar Chavez Park (Foothill Boulevard and Bridge Avenue) are located approximately 0.62 and 0.72 miles from the Project site, respectively.

### *Historic Resources*

As described in Section 4.7.3, *Cultural Resources*, the properties adjacent to and in the vicinity of the Project site do not meet the conditions for consideration as historical resources for the purposes of CEQA.

## 4.7.2.2 Regulatory Setting

### *California Scenic Highway Program*

The California Scenic Highway Program protects scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to identified scenic highways. "Officially Designated State Scenic Highways" must have a scenic corridor protection program, or its equivalent adopted by the local jurisdiction, to preserve the scenic quality of the corridor and address land use, development density, earthmoving, landscaping, building design, and outdoor advertising, including billboards, within the corridor. There are no officially designated or eligible State scenic highways within or adjacent to the Project site.

### *California Building Standards Code Title 24*

#### Parts 1 and 6 – Outdoor Lighting Zones

In 2001, the California Legislature passed a bill requiring the California Energy Commission (CEC) to adopt energy-efficient standards for outdoor lighting for both the public and private sector. In November 2003, the CEC adopted changes to the Building Energy Efficiency Standards within Title 24. The standards specify outdoor lighting requirements for residential and non-residential development, and are on a three-year update and renewal cycle, along with the other parts of Title 24. The intent of these standards is to improve the quality of outdoor lighting and

reduce the impacts of light pollution, light trespass and glare. The standards regulate lighting characteristics, such as maximum power and brightness, shielding, and use of sensor controls to turn lighting on and off. Different lighting standards have been established for four lighting zone classifications. Based on population figures in the 2000 Census, areas can be designated by this State specification system as LZ1 (dark), LZ2 (low), LZ3 (medium), or LZ4 (high). Lighting standards for dark and rural areas are stricter for example, to provide appropriate protection from new sources of light pollution and light trespass. According to the U.S. Census Bureau, the entire Project area is defined as an urban area and is therefore designated as LZ3 per the CEC classification standards (CEC, 2018).

## *City of Oakland General Plan*

### Land Use and Transportation Element (LUTE)

The following City of Oakland General Plan Land Use and Transportation Element policies are relevant to the aesthetics and lighting impacts of the Project (City of Oakland, 2007):

**Objective I/C4:** Minimize land use compatibility conflicts in commercial and industrial areas through achieving a balance between economic development values and community values.

***Policy I/C4.3: Reducing Billboards.*** Billboards should be reduced or eliminated in commercial and residential areas in Oakland neighborhoods through mechanisms that minimize or do not require the expenditure of City funds.

**Objective T6:** Make streets safe, pedestrian accessible, and attractive.

***Policy T6.2: Improving Streetscapes.*** The City should make major efforts to improve the visual quality of streetscapes. Design of the streetscape, particularly in neighborhoods and commercial centers, should be pedestrian-oriented and include lighting, directional signs, trees, benches, and other support facilities.

***Policy T6.5: Protecting Scenic Routes.*** The City should protect and encourage enhancement of the distinctive character of scenic routes within the City, through prohibition of billboards, design review, and other means.

**Objective N1:** Provide for healthy, vital, and accessible commercial areas that help meet local consumer needs in neighborhoods.

***Policy N1.5: Designing Commercial Development.*** Commercial development should be designed in a manner that is sensitive to surrounding residential uses.

**Objective N8:** Direct urban density and mixed-use housing development to locate near transit or commercial corridors, transit stations, the Downtown, waterfront, underutilized properties where residential uses do not presently exist but may be appropriate, areas where this type of development already exists and is compatible with desired neighborhood character, and other suitable locations.

***Policy N8.2: Making Compatible Interfaces between Densities.*** The height of development in urban residential and other higher density residential areas should step down as it nears lower density residential areas to minimize conflicts at the interface between the different types of development.

**Objective N9:** Promote a strong sense of community within the City of Oakland, and supporting and enhance the district character of different areas of the City, while promoting linkages between them.

***Policy N9.5: Marking Significant Sites*.** Identify locations of interest and historic significance by markers, signs, public art, landscape, installations, or by other means.

### Open Space, Conservation and Recreation Element (OSCAR)

The Open Space, Conservation and Recreation Element (OSCAR) promotes the preservation and good design of open space, and the protection of natural resources to improve aesthetic quality in Oakland. The following OSCAR objectives and policies are relevant to the aesthetics impacts of the Project (City of Oakland, 1996):

**Objective CO-9: Landform.** To retain Oakland's natural features and topography wherever possible and recognize their important role in defining the character and image of the City and its neighborhoods.

***Policy OS-9.3: Gateway Improvements*.** Enhance neighborhood and City identity by maintaining or creating gateways. Maintain view corridors and enhance the sense of arrival at the major entrances to the City, including freeways, BART lines, and the airport entry. Use public art, landscaping, and signage to create stronger City and neighborhood gateways.

**Objective OS-10: Scenic Resources.** Protect scenic views and improve visual quality.

***Policy OS-10.1: View Protection*.** Protect the character of existing scenic views in Oakland, paying particular attention to: (a) views of the Oakland Hills from the flatlands; (b) views of downtown and Lake Merritt; (c) views of the shoreline; and (d) panoramic views from Skyline Boulevard, Grizzly Peak Road, and other hillside locations.

***Policy OS-10.2: Minimizing Adverse Visual Impacts*.** Encourage site planning for new development which minimizes adverse visual impacts and takes advantage of opportunities for new vistas and scenic enhancement.

***Policy OS-10.3: Underutilized Visual Resources*.** Enhance Oakland's underutilized visual resources, including the waterfront, creeks, San Leandro Bay, architecturally significant buildings or landmarks, and major thoroughfares.

**Objective OS-11: Civic Open Spaces.** To maintain and develop plazas, pocket parks, pedestrian walkways, and rooftop gardens in Oakland's major activity centers, and enhance the appearance of these and other public spaces with landscaping and art.

***Policy OS-11.2: New Civic Open Space*.** Create new civic open spaces at BART Stations, in neighborhood commercial areas, on parking garages, and in other areas where high-intensity redevelopment is proposed.

***Policy OS-11.3: Public Art Requirements*.** Continue to require public art as a part of new public buildings or facilities. Consider expanding the requirement or creating voluntary incentives to private buildings with substantial public spaces.

***Policy OS-11.4: Siting Public Art*.** Site public art with sensitivity to its surroundings. Locate public art in a manner which does not reduce useable open space in City parks or impede recreational activities.

**Objective OS-12: Street Trees.** "Green" Oakland's residential neighborhoods and commercial areas with street trees.

***Policy OS-12.1: Street Tree Selection*.** Incorporate a broad and varied range of tree species which is reflected on a city-maintained list of approved trees. Street tree selection should respond to the general environmental conditions at the planting site, including climate and micro-climate, soil types, topography, existing tree planting, maintenance of adequate distance between street trees and other features, the character of existing development, and the size and context of the tree planting area.

#### Historic Preservation Element

In March 1994, the Oakland City Council adopted the Historic Preservation Element of the Oakland General Plan (amended July 21, 1998). The following Historic Preservation Element goal addresses historic resources and visual resources (City of Oakland, 1998):[3]

**Goal 2:** To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value. Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural features related to human presence, and activities taking place on or within such properties or physical features.

#### Scenic Highways Element

The Scenic Highways Element of the Oakland General Plan seeks to protect and enhance the distinctive character of scenic routes within the City. I-580 is identified as a designated scenic route in the Scenic Highways Element. I-980 is identified as a route that could be considered for possible future designation (City of Oakland, 1974).

### *Oakland Municipal Code*

The following provisions of the Oakland Municipal Code are relevant to aesthetics:

#### Title 8: Health and Safety

**Chapter 8.10: Graffiti.** This chapter is to protect public and private property from acts of defacement by graffiti.

**Chapter 8.24: Property Blight.** This chapter requires a level of maintenance of residential, commercial, and industrial property that will protect and preserve the livability, appearance, and social and economic stability of the City.

#### Title 12: Streets, Sidewalks and Public Places

**Chapter 12.36: Protected Trees.** It is the interest of the City of Oakland and the community to protect and preserve trees by regulating their removal; to prevent unnecessary tree loss and minimize environmental damage from improper tree removal; to encourage appropriate tree replacement plantings; to effectively enforce tree preservation regulations; and to promote the appreciation and understanding of trees.

[3] See also Section 4.7.4, *Cultural Resources*, for a more detailed discussion of the Historic Preservation Element.

### Title 17: Planning

The Oakland Planning Code, Title 17 of the Oakland Municipal Code, includes design review procedures and also outlines sign limitations, height restrictions, usable open space requirements, and minimum yards for developments located in each zone. The following would apply to the Project:

**Chapter 17.124: Landscaping and Screening Standards.** This chapter prescribes standards for development and maintenance of planting, fences, and walls; for the conservation and protection of property; and through improvements of the appearance of individual properties, neighborhoods, and the City.

**Chapter 17.136: Design Review Procedure.** In accordance with Chapter 17.136 of the Oakland Planning Code, future individual cumulative development projects would be subject to Design review. Design review considers the visible features of a project and the project's relationship to its physical surroundings. Although independent of CEQA and the EIR process, design review is focused on ensuring quality design, and on avoiding potentially adverse aesthetic effects. Projects are evaluated based on site, landscaping, height, bulk, arrangement, texture, materials, colors, appurtenances, potential shadowing effects on adjacent properties, and other characteristics.

## *Oakland Outdoor Lighting Standards*

The City of Oakland Outdoor Lighting Standards is applicable to private development projects on public rights-of-way. As such, the requirements in the standard are assumed to apply to all new streetscape improvements. Requirements include general glare, light trespass, and light pollution mitigation measures, such as using full-cutoff luminaires wherever available, and avoiding bare light sources (bulbs). In addition, the standard provides specific lighting equipment guides relevant to street and pedestrian light pole heights.

## *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on aesthetics and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to aesthetics. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA AES-1: Trash and Blight Removal** *(Standard Condition of Approval 16)*

**Requirement:** The project applicant and his/her successors shall maintain the property free of blight, as defined in chapter 8.24 of the Oakland Municipal Code. For nonresidential and multi-family residential projects, the project applicant shall install and maintain trash receptacles near public entryways as needed to provide sufficient capacity for building users.

**SCA AES-2: Graffiti Control** *(Standard Condition of Approval 17)*

**Requirement:**

a. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation:

   i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces.

   ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces.

   iii. Use of paint with anti-graffiti coating.

   iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED).

   v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement.

b. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following:

   i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system.

   ii. Covering with new paint to match the color of the surrounding surface.

   iii. Replacing with new surfacing (with City permits if required)

**SCA AES-3: Landscape Plan** *(Standard Condition of Approval 18)*

***a. Landscape Plan Required***

**Requirement:** The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. Proposed plants shall be predominantly drought-tolerant. Specification of any street trees shall comply with the Master Street Tree List and Tree Planting Guidelines (which can be viewed at http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oak042662.pdf and http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oak025595.pdf, respectively), and with any applicable streetscape plan.

***b. Landscape Installation***

**Requirement:** The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of $2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid.

*c. Landscape Maintenance*

**Requirement:** All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

**SCA AES-4: Lighting** (Standard Condition of Approval 19)

**Requirement:** Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties.

## 4.7.2.3 Topics Considered and No Impact Determined

### *Wind (Criterion 10)*

According to the City's CEQA Thresholds of Significance, wind analysis only needs to be done if a project's height is 100 feet or greater (measured to the roof) and one of the following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown. The Project would construct a single-story industrial use facility that would be less than 100 feet tall. Therefore, the Project would have no impact with regard to wind.

## 4.7.2.4 Project Impacts and Discussion

**Impact AES-1: The Project would not have a substantial adverse effect on a public scenic vista or substantially damage scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings, located within a state or locally designated scenic highway (Criterion 1 and 2). (*Less than Significant*)**

The OSCAR Element includes objectives to enhance underutilized visual resources, including the waterfront, creeks, San Leandro Bay, and architecturally significant buildings or landmarks, and major thoroughfares (City of Oakland, 1996). The Project would construct an approximately 430,000 square foot, 56-foot-tall industrial building in place of the existing 1,240,000 square feet of building space that is currently onsite. As discussed in Section 4.7.2.1, *Environmental Setting*, existing long-range views across and surrounding the Project site from public viewpoints are mostly blocked by intervening development; therefore, there are no existing public scenic vistas on which the Project could have an adverse effect.

As discussed in Section 4.7.2.2, *Regulatory Setting*, there are no officially designated or eligible State scenic highways within or adjacent to the Project site. The nearest designated State Scenic Highway is I-580, which is approximately 1.84 miles from the Project site. Due to this distance and because of intervening development, vegetation, and topography, the Project would not substantially interfere with views of any possible scenic resources for motorists on I-580. Therefore, the Project would not adversely affect designated or eligible State Scenic Highways.

Overall, the Project would not have an adverse impact on scenic resources and scenic vistas and would not result in a significant impact. Additionally, as part of the development process, the Project would be required to undergo design review (Chapter 17.136 of the Oakland Planning Code). Design review is focused on ensuring quality design, and on avoiding potentially adverse aesthetic effects. Projects are evaluated based on site, landscaping, height, bulk, arrangement, texture, materials, colors, appurtenances, potential shadowing effects on adjacent properties, and other characteristics.

**Mitigation:** None required.

---

**Impact AES-2: The Project would not substantially degrade the existing visual character or quality of the site and its surroundings (Criterion 3). (*Less than significant with SCAs*)**

Changes in the visual character or quality of a site are typically perceived subjectively and reactions vary by individual. The City's General Plan provides guidance that reflects the diverse nature of the built environment in Oakland and the complex nature of urban design in the community. Policies such as T6.2 and OS-9.3, listed above, reflect Oakland's desire to improve the visual quality of streetscapes and major entrances to City neighborhoods.

The Project site is currently developed by approximately 1,240,000 square-feet of building space. Surrounding developments include large-box commercial buildings; single-family residences; surface parking lots to the east, north, south; and a road/railroad tracks to the west. The Project would be consistent with the commercial buildings located to the west of the site, across Fruitvale Avenue, and with the Home Depot building supply store located immediately adjacent to the eastern boundary of the site.

The Project would include an employee parking lot and a 20-foot-wide landscaping area, which would result in an overall 91-foot buffer between the proposed building and the northern Project site boundary. The land dedicated to the City for a potential future East 7th Street extension would provide an additional buffer between the proposed project building and the residential uses to the north. Additional landscaped and amenity areas are proposed along the Project site perimeter. Therefore, the Project would not introduce a new visual element that is inconsistent with the established visual patterns in the Project vicinity.

In addition, the Project would be required to comply with the City of Oakland SCA AES-1, Trash and Blight Removal; SCA AES-2, Graffiti Control; and SCA AES-3, Landscape Plan, related to landscaping, street frontages, landscape maintenance, public right-of-way improvements, and graffiti control, to enhance overall aesthetics. Therefore, the Project would be consistent with the Oakland General Plan policies OS-9.3, OS-11, OS-11.2, and T6.2, which reflect the City's desire to improve the visual quality of streetscapes, improve major entrances to City neighborhoods, and to create, maintain, and enhance civic open spaces. The Project would be subject to design review and would be required to conform with applicable design review criteria. For these reasons, the overall effect of Project related to visual character would not be adverse and the impact would be less than significant.

**SCA AES-1: Trash and Blight Removal.**

**SCA AES-2: Graffiti Control.**

**SCA AES-3: Landscape Plan.**

**Mitigation:** None required.

---

**Impact AES-3: The Project would not create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area (Criterion 4). *(Less than significant with SCAs*)**

The Project would utilize nighttime lighting for operational and security purposes and would result in similar levels of light and glare typical for industrial commercial warehouse developments of this scale. Implementation of SCA AES-4, Lighting, would require that new exterior lighting fixtures be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties and beyond. Additionally, the Project would be required to comply with the City of Oakland Outdoor Lighting Standards for the proposed streetscape improvements, which would reduce general glare, light trespass, and light pollution. Therefore, the Project would not create a substantial new source of light or glare which could substantially and adversely affect day or nighttime views in the area.

**SCA AES-4: Lighting.**

**Mitigation:** None required.

---

**Impact AES-4: The Project would not cast shadow that substantially impairs a nearby use reliant on sunlight, including the following functions: a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors; the beneficial use of any public or quasi-public open space; a historic resource; or result in an exception to the policies in the General Plan, Planning Code, or Uniform Building Code, and the exception causes there to be a fundamental conflict with policies and regulations addressing the provision of adequate light related to appropriate uses (Criterion 5, 6, 7, 8, and 9). *(Less than significant*)**

The Project would construct approximately 430,000 square feet of industrial and office space and Project operations could include an additional 10,000 square feet of retail uses. In addition, the Project would develop 295 automobile parking spaces to the north of the building and 228 truck trailer parking stalls south of the buildings for employees and users of the Project. The final height of the development would be approximately 56 feet. Surrounding developments include parking lots to the east, north, south, and a road/railroad tracks to the west. The nearest solar collectors are approximately 315 feet northwest of the Project site at 610 Lancaster Street.

Shadows are cast to the west by objects during the morning hours when the sun is coming up on the horizon in the east. During the late morning and early afternoon, the shadows of objects move

northerly and by late afternoon they are cast easterly in response to the movement of the sun across the sky from east to west. Based on the sun elevation angle on the winter solstice, shadows from a vertical mass are up to 56 feet could cast shadows on a horizontal surface 315 feet away. During the afternoon hours of the winter solstice, when shadows are longest and in the northeast direction, the Project would not cast a shadow on these solar collectors resulting in a substantial loss of power, income, or use from the collectors. Furthermore, any loss in energy resulting from the Project's shading of the solar collectors can be made up with additional power drawn from the local electricity provider, Pacific Gas & Electric (PG&E), with no impairment to the functionality of the building served by those facilities. Therefore, the Project shadow would not result in a substantial loss of power, income, or use from the collectors. No other solar collectors are within the Project shadow's path and therefore, the Project would not cast shadow that would substantially impair the function of existing solar collectors in use on surrounding buildings.

Although the area designated as Fruitvale Bridge Park is in close proximity to the Project site, the Project would develop areas closest to the park with truck trailer stalls and parking that would not cast substantial shadow on the park area due to the relative location and height of the proposed building. The area designated as Fruitvale Bridge Park is located more than 400 feet south of the southwestern corner of the proposed industrial building. Given the 56-foot height of the proposed industrial building, its distance to the area designated as Fruitvale Bridge Park, and its position north of the park, the Project would not generate new shadow on existing public or quasi-public park, lawn, garden, or open space. Therefore, the Project would not substantially impair any public open space.

The nearest historic-age resource is the 36th Avenue/East 8th Street Residential District ASI and an individual property at 703 37th Avenue (this appears to be an electrical substation that is not a contributor to the ASI) with an OCHS rating of C3. Other historic-age resources are not close enough to the Project site to be shaded by the Project building at any time of year. Although the Project building could cast shadow across Boehmer Street on winter afternoons, there are no designated historic resources where access to light is an important characteristic such that the new shadow would "materially impair" the resource's historic significance. In addition, as described in the Section 4.7.4, *Cultural Resources*, the adjacent properties do not meet the conditions established in Section 17.158.090 for consideration as historical resources for the purposes of CEQA. Therefore, the Project impact with respect to shading historic resources would be less than significant. As discussed in Section 4.7.8, *Land Use and Planning*, the Project would construct an industrial building that would be developed within the allowable FAR requirements of the General Plan land use and zoning designation. The Project would comply with all zoning and Planning Code requirements, and provide adequate light and ventilation as required per Code requirements. As discussed above, the Project would not result in a significant effect with regard to access to light for solar collectors, public open spaces, or historic resources. Therefore, the Project impact related to the provision of adequate light related to appropriate uses would be less than significant.

**Mitigation:** None required.

### 4.7.2.5 Cumulative Impacts

**Impact AES-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative aesthetic impacts. *(Less than Significant with SCAs*)**

The geographic scope for cumulative effects on aesthetics includes the areas surrounding the Project site. Cumulative development projects near or adjacent to the Project site could result in cumulative aesthetics impacts. However, implementation of applicable SCAs (i.e., SCAs AES-1, AES-2, and AES-3, discussed above) would reduce the Project's less-than-significant aesthetics impacts. Cumulative development would also be subject to these SCAs and no cumulative impact would result.

**SCA AES-1: Trash and Blight Removal.**

**SCA AES-2: Graffiti Control.**

**SCA AES-3: Landscape Plan.**

**SCA AES-4: Lighting.**

**Mitigation:** None required.

---

### 4.7.2.6 References

California Energy Commission (CEC). 2018. *Building Energy Efficiency Standards for Residential and Nonresidential Buildings for the 2019 Building Energy Efficiency Standards Title 24, Part 6, and Associated Administrative Regulations in Part 1*. December 2018. Accessed May 2022. https://www.energy.ca.gov/sites/default/files/2021-06/CEC-400-2018-020-CMF_0.pdf.

City of Oakland. 1974. *Scenic Highways, An Element of the Oakland Comprehensive Plan*. September 1974.

City of Oakland. 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*. Adopted June 11, 1996.

City of Oakland. 1998. *Historic Preservation Element of the Oakland General Plan*. March 8, 1994; amended July 21, 1998.

City of Oakland. 2007. *Land Use and Transportation Element of the Oakland General Plan*. March 24, 1998; amended June 21, 2007.

---

# 4.7.3 Agriculture and Forestry Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **II. AGRICULTURE AND FORESTRY RESOURCES —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) 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; | ☐ | ☐ | ☐ | ☒ |
| 2) Conflict with existing zoning for agricultural use, or a Williamson Act contract; | ☐ | ☐ | ☐ | ☒ |
| 3) 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)); | ☐ | ☐ | ☐ | ☒ |
| 4) Result in the loss of forest land or conversion of forest land to non-forest use; or | ☐ | ☐ | ☐ | ☒ |
| 5) 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. | ☐ | ☐ | ☐ | ☒ |

## 4.7.3.1 Environmental Setting

The Project site is within the Central Estuary Plan Area, which does not include any agricultural land use designations. The entirety of the Fruitvale District of Oakland, including the Project site, is located within an area designated as urban and built-up land by the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP) (DOC, 2019). There are also no Williamson Act contracts on or adjacent to the Project site (DOC, 2015). The City of Oakland does not designate land uses for agriculture or forestry in its General Plan or Zoning Map (City of Oakland, 2015; 2018).

## 4.7.3.2 Topics Considered and No Impact Determined

Since the Project site is located on land designated as urban and built-up land, and is not subject to a Williamson Act contract, the Project would not convert FMMP- designated Farmland or cause a conflict with an existing Williamson Act contract.

The Project site currently has a General Plan land use designation of Estuary Policy Plan (EPP) Heavy Industry General Plan and is within Central Estuary Industrial Zone-6 (D-CE-6) zoning district. The Project site does not contain agricultural production or forest land and does not propose agricultural or forestry-related land uses as part of the Project. Thus, the Project would not conflict with existing zoning for agricultural use, forest land, or timberland, nor would it result in the loss or conversion of forest land.

### 4.7.3.3 Cumulative Impacts

Because the Project would have no impact related to the loss or conversion of agricultural or forestry resources, it would not cause or contribute to any cumulative impact to these resources.

### 4.7.3.4 References

California Department of Conservation (DOC). 2015. Division of Land Resource Protection, *Alameda County Williamson Act FY 2014/2015*. Accessed December 30, 2021. https://s3-us-west-1.amazonaws.com/waterfrontballparkdistrict.com/25_ReferencesintheDraftEIR-Section4-17NS/2015-00-00-DOC-AlamedaIndex.pdf.

DOC. 2019. *California Important Farmland Finder*. Alameda County Important Farmland 2016, database updated December 27, 2019. Accessed December 30, 2021. https://gis.data.ca.gov/datasets/8ab78d6c403b402786cc231941d1b929.

City of Oakland. 2015. *General Plan Designations*. May 19, 2015. Accessed December 30, 2021. https://cao-94612.s3.amazonaws.com/documents/General-Plan-Designations-20150519.pdf.

City of Oakland. 2018. *City of Oakland Zoning and Estuary Policy Plan Maps.* Bureau of Planning. December 11, 2018. Accessed December 30, 2021. https://cao-94612.s3.amazonaws.com/documents/Zoning_EPP_Map_20181211.pdf.

# 4.7.4 Cultural Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **V. CULTURAL RESOURCES —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5. Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be "materially impaired." The significance of an historical resource is "materially impaired" when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that convey its historical significance **and** that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register of Historical Resources, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1-5); | ☐ | ☐ | ☒ | ☐ |
| 2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5; | ☐ | ☐ | ☒ | ☐ |
| 3) Disturb any human remains, including those interred outside of dedicated cemeteries. | ☐ | ☐ | ☒ | ☐ |

## 4.7.4.1 Tribal Cultural Resources

See Section 4.7.13, *Tribal Cultural Resources*, of this chapter for an analysis of potential Project impacts to tribal cultural resources.

## 4.7.4.2 Definitions and Data Sources

A historical resource is defined in CEQA Guidelines Section 15064.5(a) as one that is listed in, or determined to be eligible for listing in, the California Register of Historical Resources (California register). In addition, a resource that (i) is identified as significant in a local register of historical resources,[4] or (ii) is deemed significant due to its identification in a historical resources survey meeting the requirements of California Public Resources Code Section 5024.1(g) is presumed to be a historical resource "unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant." CEQA Section 21084.1 also permits a lead agency to determine that a resource constitutes a historical resource even if the resource does not meet the foregoing criteria.

[4] The City of Oakland classifies Areas of Primary Interest (API), contributors to APIs, and individual properties with Oakland Cultural Heritage Survey (OCHS) ratings of A or B as significant local register properties. See Section 4.7.4.2, *Definitions and Data Sources*, for more information about local register criteria.

For the purposes of this analysis, the term *historic architectural resource* is used to distinguish such resources from archaeological resources, which may also be considered historical resources under CEQA Guidelines section 15064.5.

The information and analysis in this section is based on a review of the Project; applicable local policies and regulations; the preliminary findings memo prepared by LSA in May 2021 (LSA, 2021); and the historic resource evaluation prepared by Page & Turnbull in December 2021 (Page & Turnbull, 2021). The preliminary findings memo, historic resource evaluation, and ESA's peer review of the historic resource evaluation prepared in January 2021 are included as Appendix L.

## 4.7.4.3 Environmental Setting

### *Prehistoric Background*

Categorizing the prehistoric period into cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given timeframe, thereby creating a regional chronology. Milliken et al. (2007) provide a framework for interpreting the San Francisco Bay Area and have divided human history of the region into four periods: the *Paleoindian Period*, the *Early Period*, the *Middle Period*, and the *Late Period*. Economic patterns, stylistic aspects, and regional phases further subdivide cultural patterns into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

The *Paleoindian Period* (11,500 to 8000 B.C.) was characterized by big-game hunters occupying broad geographic areas. Evidence of human habitation during the *Paleoindian Period* has not yet been discovered in the Bay Area.

During the *Early Period* (8000 to 3500 B.C.), also known as the *Lower Archaic*, geographic mobility continued from the *Paleoindian Period*. The period is characterized by the millingslab and handstone as well as large wide-stemmed and leaf-shaped projectile points. The first cut-shell beads and the mortar and pestle are documented in burials during the *Early Period* (3500 to 500 B.C.), indicating the beginning of a shift to sedentism.

During the *Middle Period*, which includes the *Lower Middle Period* (500 B.C. 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 more 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 as evidenced by the sudden collapse of the *Olivella* saucer-bead trade network.

The *Initial Late Period* (A.D. 1050 to 1550) is characterized by 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.

### *Ethnohistorical Context*

Based on a compilation of ethnographic, historic, and archaeological data, Milliken (1995:13–14) describes a group known as the Ohlone, who once occupied the general vicinity of the proposed Project. While traditional anthropological literature portrayed the Ohlone peoples as having a static culture, today it is better understood that many variations of culture and ideology existed within and between villages. While these static descriptions of separations between native cultures of California make it an easier task for ethnographers to describe past behaviors, this masks Native adaptability and self-identity. California's Native Americans never saw themselves as members of larger cultural groups, as described by some anthropologists. Instead, they saw themselves as members of specific villages, perhaps related to others by marriage or kinship ties, but viewing the village as the primary identifier of their origins.

Levy (1978:485–495) describes the language group spoken by the Ohlone, known as "Costanoan." This term is originally derived from a Spanish word designating the coastal peoples of Central California. Today Costanoan is used as a linguistic term that references to a larger language family spoken by distinct sociopolitical groups that spoke at least eight languages (as different as Spanish is from French) of the same Penutian language group. The Ohlone once occupied a large territory from San Francisco Bay in the north to the Big Sur and Salinas Rivers in the south. Archaeological investigations at nearby pre-contact sites indicate that while Native Americans mainly utilized the marshland for resource procurement, including the collection of fish, shellfish, plants, and sea mammals, habitation and burial sites were not uncommon along the historic bay margins.

Economically, Ohlone engaged in hunting and gathering. Their territory encompassed both coastal and open valley environments that contained a wide variety of resources, including grass seeds, acorns, bulbs and tubers, bear, deer, elk, antelope, a variety of bird species, and rabbit and other small mammals. The Ohlone acknowledged private ownership of goods and songs, and village ownership of rights to land and/or natural resources; they appear to have aggressively protected their village territories, requiring monetary payment for access rights in the form of clamshell beads, and even shooting trespassers if caught. After European contact, Ohlone society was severely disrupted by missionization, disease, and displacement. Today, the Ohlone still have a strong presence in the greater San Francisco Bay Area, and are highly interested in their historic and pre-contact past.

### *Historic Setting*

The following section summarizes the general history of the area and the Project site in detail, as presented in Page and Turnbull's 2021 historic resource evaluation and LSA's 2021 preliminary findings memo (see Appendix L).

#### Early Industrial Development Along the Oakland Estuary

Until the 1870s, Oakland's waterfront extended from San Francisco Bay on the west to Brooklyn Basin on the east. Industrial development in the vicinity of the waterfront was initially spurred by

ready access to water transportation. In 1869, Oakland became the western terminus of the transcontinental railroad, and this, in turn, hastened more industrial, commercial, and residential development throughout the City, including along the Oakland Estuary. In 1902, the Alameda Tidal Canal opened, physically separating Oakland from the newly created island of Alameda and extending the Oakland Estuary from San Francisco Bay to San Leandro Bay. Soon after, thousands of people were displaced by the 1906 San Francisco Earthquake and Fire, and many permanently relocated to Oakland and reestablished their businesses in the East Bay. To accommodate its increasing population and need for land to support robust industrial development, the City annexed several neighborhoods in present-day East Oakland and the expanded waterfront area in 1909.

Over the course of the early 20th century, Oakland developed into one of the West Coast's leading industrial centers. The City was strategically located at the center of the greater San Francisco Bay Area and a short distance from the Golden Gate that provided access to shipping channels in the Pacific Ocean. The Southern Pacific, Western Pacific, and Santa Fe railroads established extensive rail networks across the City and encouraged industrial development in North Oakland and Emeryville as well as eastward along San Leandro Boulevard. Notable local industries in East Oakland included automobile assembly plants, several early electronics manufacturers, and food processing and distribution.

The Project site was first developed in 1902, when it became the location of the Pacific States Refineries. The oil refinery was destroyed by fire in 1913. Other industrial activities established in the early 20th century within a half-mile of the Project site included the Leona Chemical Company and the Electro-Alkaline Company (later the Clorox Chemical Company), both of which were located to the southeast near High Street and are no longer extant. The historic resource evaluation identified 16 extant industrial properties in the vicinity of the Project site that are either Areas of Primary Importance (API), Areas of Secondary Importance (ASI), or Potential Designated Historic Properties (PDHP). Of these, it appears that seven (one ASI and six PDHPs) are located within a half-mile of the Project site, and none are adjacent to the Project site.

### Owens-Illinois Glass Company Plant 20

The Project site is occupied by the former Owens-Illinois Glass Company Plant 20, which manufactured container glass and cardboard packaging material. Construction of the plant began in 1936, and it replaced two factories in San Francisco that predated the 1932 merger of Owens-Illinois and the Illinois-Pacific Glass Company. The company's internal engineering department developed plans for the plant and engaged noted San Francisco engineers H.J. Brunnier and Kaj Theill to assist in the design of several buildings. The Plant 20 buildings were constructed of reinforced concrete with brick cladding, and the design also incorporated "Insulux" glass blocks, glass wool insulation, and glass dust filters manufactured by Owens-Illinois. The June 1938 issue of *The Architect and Engineer* featured the design of Plant 20 and highlighted the facility's modern design, inventive use of certain materials (e.g., glass blocks and glazed terra cotta Kraftile wall covering), and plentiful safety features and equipment.

Buildings remaining from the initial period of construction (i.e., 1936–38) include Building 1 (office), Building 6 (compressor building), Building 7 (batch plant), Buildings 8–10 (factories),

Buildings 11 and 29 (warehouses), Building 12 (factory/office/warehouse), Building 13 (rolled paper storage), and Building 19 (butane mixing plant) (Figure 5.4-1).

Several major expansions occurred later in the 20th century. In 1952, the 100,000-square-foot Building 41 (warehouse and loading dock) was constructed, obstructing the two original public entrances on 36th Avenue and Post Street and surrounding and obscuring the northern portion of Building 1. In 1985, the massive Building 43 and 44 (warehouses) were constructed, resulting in further enclosure of and alterations to Building 1 (Figure 5.3-1). A few buildings and structures are no longer extant, including Building 33 (central mold and machine shops; demolished in 1985) and two of the five original smokestacks (demolished in 1999).

Owens-Illinois purchased Brockway Inc. in 1988, and the company was renamed Owens-Brockway and added glass recycling to its historic operations at that time. Operations of Plant 20 ceased in 2015.

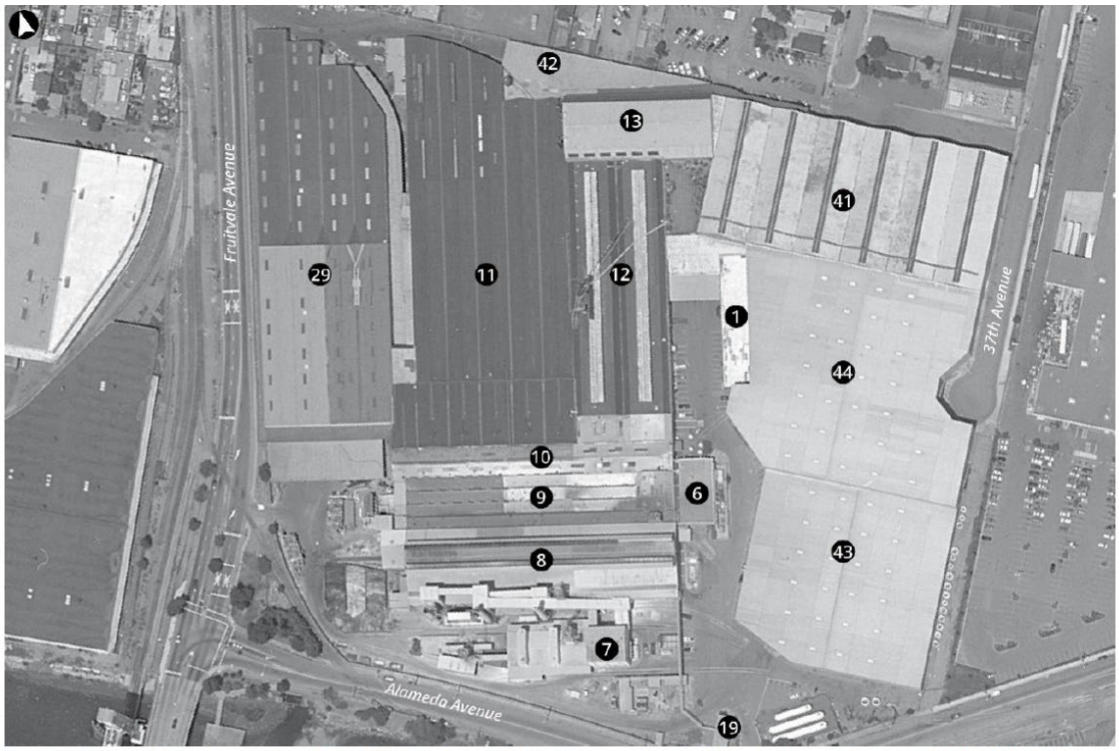



Figure 82. Aerial Photograph of Plant 20, taken 2000. Source: Hauts-Monts, Inc., Flight HM-2000-USA, Frame 1122-8. Collection of U.C. Santa Barbara Library, edited by Page & Turnbull.

### Historical Status of Project Site

The former Owens-Illinois Glass Company Plant 20 operations ceased in 2015. The plant is currently composed of 15 buildings and structures and associated landscape elements that were constructed between 1936 and 1987.

The plant was first evaluated in 1994 as part of the Oakland Cultural Heritage Survey (OCHS) and assigned a preliminary rating of Cb+3 (i.e., a property of Secondary Importance that is not located in a historic district and could potentially be given a rating of Major Importance if

restored). Additionally, the property is listed in the Office of Historic Preservation (OHP) Built Environment Resources Directory (BERD) for Alameda County with a California Historical Resource Status Code (CHRSC) of 7N1 (i.e., a property that needs to be reevaluated and may become eligible for listing in the National Register "with restoration or other specific conditions").

The plant was reevaluated in 2021, at which time it was confirmed that the property is significant as a historic district with 11 contributing buildings and structures and a period of significance of 1936-38 (Page & Turnbull, 2021; Appendix L). However, the plant had experienced a loss of historic materials from regular upgrades, maintenance, and irreversible alterations during the plant's operation resulting in a lack of integrity. Alterations, new construction, and demolition were first observed in the 1994 OCHS evaluation and later thoroughly documented in the 2021 historic resource evaluation. It was therefore recommended that the preliminary OCHS rating should be revised to an unmodified C (i.e., a property of Secondary Importance) and the CHRSC should be revised to 6Z (i.e., ineligible for listing in the National Register, California Register, or local designation through survey evaluation). City of Oakland preservation planning staff concurred with the findings presented in the 2021 historic resource evaluation.[5] Therefore, the subject property is not considered a historical resource under CEQA.

### Historic-Age Resources in the Vicinity of the Project Site

As noted above, the 2021 historic resource evaluation identified 16 industrial properties that "reflect industrial development in the vicinity of the Owens-Illinois Plant 20 in the early decades of the twentieth century" that are either ASIs or PDHPs. (There are no APIs within a half-mile of the Project site.) These properties represent a period of Oakland's history when it was known for its industrial output. Proximity to the railroads and the estuary resulted in many facilities being constructed in the flatlands south of East 14th Street / International Boulevard. While many of these industries and companies no longer operate in the City, their campuses remain scattered throughout East Oakland.

Although none are adjacent to the Project site, 7 of the 16 nearby industrial properties are located within a half-mile of the Project site, including:

- Vulcan Foundry, 4321 and 4401 San Leandro Street, ASI, constructed 1924–1930
- Bell Cleaning and Dyeing Co., 752 High Street, PDHP, constructed ca. 1920
- Clorox Chemical Corporation, 850 42nd Avenue, PDHP, constructed ca. 1924–1925
- Atlas Imperia Diesel Engine Co., 400 Derby Avenue, PDHP, constructed in the 1910s
- Gilro Machine & Stamping Co., 2915 Ford Street, PDHP, constructed in the 1910s
- Halstead Products Co., 2912 Ford Street, PDHP, constructed in the 1920s
- Rhodes & Jamieson Ltd., 333 23rd Avenue, PDHP, constructed in the 1920s

[5] Betty Marvin (City of Oakland), email to Elizabeth Kanner (ESA), January 26, 2022.

Based on a cursory internet search, none appear to have manufactured glass or cardboard like the Owens-Illinois Glass Company Plant 20. Furthermore, these properties do not appear to relate to one another as parts of a district.

Several non-industrial historic-age resources are adjacent to and outside of the Project site. These include the 36th Avenue/East 8th Street Residential District ASI and the individual property at 703 37th Avenue (this appears to be an electrical substation that is not a contributor to the ASI) with an OCHS rating of C3 (i.e., a property of Secondary Importance that is not located in a historic district). Neither ASIs nor C-rated properties are considered CEQA-eligible resources.

### *Archaeological Resources*

A review of records from the Northwest Information Center of the California Historical Resources Information System indicates that there are no previously recorded prehistoric or historic-era archaeological sites in the Project site (NWIC, 2022). The nearest prehistoric resources are located over 0.5 mile to the southwest and 2 miles to the southeast. Historic-era archaeological resources, consisting of artifact-filled privy deposits associated with early historic-era residences, have been encountered approximately 1,500 feet southeast of the Project site; these types of resources are not anticipated in the Project site because of its continued use as a manufacturing facility since the early 1900s.

Historic maps show that Sausal (Diamond) Creek flowed along the west side of the Project site prior to the U.S. Army Corps of Engineers excavation of the present-day Tidal Canal and channelization of the creek (USGS, 1897, 1915; Sanborn, 1912). As noted above, the first construction on the Project site was the Pacific States Refinery, established in 1902. By 1912, the facility included an oil refinery with buildings and tanks serving asphalt production and a lubricating plant (Sanborn, 1912). Much of the plant was destroyed by a fire in December 1913, in which a "receiving tank containing 10,000 barrels of oil, two tanks of benzine containing 25,000 gallons each, and several smaller tanks of gasoline and oil products ignited simultaneously" (Examiner, 1913).

In 1936, construction began of the existing Oakland Owens-Brockway Plant 20, formerly the Owens-Illinois Pacific Coast Company, with operations starting in 1938. In addition to the 15 buildings and associated utilities, underground fuel storage tanks were installed in 1936 to provide fuel storage to operate furnaces and mobile equipment but were removed in 1986.

The Project site is in an area mapped as Holocene-age Younger alluvial fan deposits (Graymer, 2000; Kleinfelder, 2021). This geologic formation has the potential to contain buried soil surfaces that may also harbor buried prehistoric archaeological resources (Meyer and Rosenthal, 2007). Geotechnical data indicates the Project site is underlain by interbedded clays, clayey silts and sands, sands, and gravels, and that artificial fill has been placed for building pads or pavement support. The fill is underlain by sandy and silty clays to depths of 9 to 14 feet below ground surface. Groundwater has been encountered at the Project site from 8 to 15 feet bgs (Kleinfelder, 2021).

While the general geologic context suggests prehistoric buried site sensitivity, the extensive historic-era development of the Project site further indicates that the potential to encounter

prehistoric archaeological resources during Project implementation is relatively low. As noted above, the previous uses of the Project site indicate the historic-era archaeological sensitivity is also relatively low.

## 4.7.4.4 Regulatory Setting

### *Federal*

#### National Register of Historic Places

Under the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108), and its implementing regulations, a property is considered significant if it meets the criteria for listing in the National Register of Historic Places (National Register) at 36 CFR 60.4, as stated below:

> The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:
>
> A. Are associated with events that have made a significant contribution to the broad patterns of our history, or
>
> B. Are associated with the lives of persons significant in our past, or
>
> C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
>
> D. Have yielded, or may be likely to yield, information important in prehistory or history.

If a federal action is required for implementation of a project, Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties (i.e., properties listed in or eligible for listing in the National Register) and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. The Section 106 review normally involves a four-step procedure, which is described in detail in the implementing regulations (36 CFR Part 800) and includes identifying historic properties in consultation with the State Historic Preservation Office (SHPO) and interested parties, assessing effects, consulting with SHPO and others to develop and execute an agreement regarding the treatment of historic properties, and proceeding with the Project according to the agreement.

### *State*

#### California Environmental Quality Act

The California Environmental Quality Act (CEQA), as codified in PRC Sections 21000 et seq., is the principal statute governing the environmental review of projects in the state. CEQA requires lead agencies to determine if a proposed project would have a significant effect on historical resources, including archaeological resources. The CEQA Guidelines (Section 15064.5(a)) define a historical resource as: (1) a resource listed in, or determined to be eligible by the State

Historical Resources Commission, for listing in the California Register of Historical Resources (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 may be considered to be historically significant, provided the lead agency's determination is supported by substantial evidence in light of the whole record. In addition, Section 15064.5 (a)(4) states that "the fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)), or identified in an historical resources survey (meeting the criteria in PRC Section 5024.1(g)) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1."

CEQA requires lead agencies to determine if a proposed project would have a significant effect on important historical resources or unique archaeological resources. If a resource is neither a unique archaeological resource nor a historical resource, the CEQA Guidelines note that the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines section 15064.5[c][4]). Projects that comply with the Secretary's Standards benefit from a regulatory presumption under CEQA that they would have a less-than-significant impact on a historical resource. Projects that do not comply with the Secretary's Standards may or may not cause a substantial adverse change in the significance of a historical resource and must be subject to further analysis to assess whether they would result in material impairment of a historical resource's significance.

### 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]). 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, a historical resource must be significant at the local, state, 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]).

Integrity is the authenticity of a historical resource's physical identity as shown by the survival of characteristics that existed during the period of significance. 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 the reasons for its significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

#### Native American Heritage Commission

The Native American Heritage Commission (NAHC) was created by statute in 1976, is a nine-member body appointed by the Governor to identify and catalog cultural resources (i.e., places of special religious or social significance to Native Americans and known graves and cemeteries of Native Americans on private lands) in California. The NAHC is responsible for preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintaining an inventory of Native American sacred sites located on public lands, and reviewing current administrative and statutory protections related to these sacred sites.

#### California Public Resources Code Sections 5097.98 and 5097.99

PRC Section 5097.98 (reiterated in CEQA Guidelines Section 15064.5(e)) identifies steps to follow in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery. PRC Section 5097.99 prohibits obtaining or possessing any Native American artifacts or human remains that are taken from a Native American grave or cairn (stone burial mound).

#### California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 protects human remains by prohibiting the disinterment, disturbance, or removal of human remains from any location other than a dedicated cemetery.

### *Local Plans, Ordinances, and Policies*

#### City of Oakland – Local Plans, Policies, and Regulations

##### Environmental Review Regulations

Under Section 17.158.090 of the City of Oakland Planning Code (2005), for purposes of evaluating environmental impacts CEQA, a historical resource is a resource that meets any of the following criteria:

1. A resource listed in, or determined to be eligible for listing in, the California Register;
2. A resource included in Oakland's Local Register of historical resources (defined in General Plan Historic Preservation Element Policy 3.8 below), unless the preponderance of evidence demonstrates that it is not historically or culturally significant;

3. A resource identified as significant (e.g., rated 1–5) in a historical resource survey recorded on Department of Parks and Recreation (DPR) Form 523, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;

4. Any object, building, structure, site, area, place, record, or manuscript which the Oakland City Council 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 determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered "historically significant" if it meets the criteria for listing on the California Register CEQA Guidelines Section 15064.5; or

5. A resource that is determined by the City Council to be historically or culturally significant even though it does not meet the other four criteria listed here.

### Regular Design Review Criteria

Design review is intended to ensure high quality attractive designs that will compliment and benefit the surrounding neighborhood and City as a whole. Design review is primarily focused on site planning and the exterior appearance of structures. This can include things such as architectural style; design quality; building materials; building mass and bulk; façade articulation; landscaping; preservation of sunlight, views, and privacy; screening of parking and loading areas; and other design related issues.

Section 17.136.075 of the City of Oakland Planning Code defines design review procedures for removal or demolition of certain categories of historic resources. As the Project site is occupied by a complex with an OCHS rating of "C" and is adjacent to a City of Oakland ASI, the regulations described below are specifically relevant.

D. Regular Design Review Approval for the demolition or removal of any structure rated "C" by the Oakland Cultural Heritage Survey or contributes to an Area of Secondary Importance (ASI) as determined by the Oakland Cultural Heritage Survey may be granted only if the proposal conforms to the general design review criteria, all other applicable design review criteria, and to either: 1., 2., or 3., below:

    1. The design quality of the proposed replacement project is at least equal to that of the original structure and the proposed replacement project is compatible with the character of the neighborhood; or

    2. The public benefits of the proposed replacement project outweigh the benefit of retaining the original structure and the proposed replacement project is compatible with the character of the neighborhood; or

    3. The existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

E. For proposals that have received Design Review approval pursuant to this Section, the issuance of a demolition permit for any structure or portion thereof may be postponed by the Director of City Planning for a period not to exceed one hundred twenty (120) days from the date of application for such permit. The Director may do so upon determination that the structure or portion thereof is listed as a Local Register Property, or is on a study list of facilities under serious study by the Landmarks Preservation Advisory Board, the City Planning Commission, or the Director, for possible landmark designation under

Section 17.136.070 or for other appropriate action to preserve it. During the period of postponement the Board, the Commission, or the Director shall explore means for preserving or restoring the structure or portion thereof. However, demolition may not be postponed under this Section if, after notice to the Director of City Planning, the Building Services Department, the Housing Conservation Division, their respective appeals boards, or the City Council determines that immediate demolition is necessary to protect the public health or safety. Any determination made by the Director of City Planning under this Section may be appealed pursuant to the administrative appeal procedure in Chapter 17.132.

### General Plan Historic Preservation Element

In March 1994, the Oakland City Council adopted the Historic Preservation Element of the Oakland General Plan (amended July 21, 1998). The Historic Preservation Element sets out a graduated system of ratings and designations resulting from the OCHS and Oakland Zoning Regulations. The following goal and policies address historical resources under CEQA (City of Oakland, 1998):

**Goal 2:** To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural, or aesthetic interest or value.

Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural features related to human presence, and activities taking place on or within such properties or physical features.

***Policy 3.1: Avoid or minimize adverse historic preservation impacts related to discretionary city actions*.** The City will make all reasonable efforts to avoid or minimize adverse effects on the Character-Defining Elements of existing or Potential Designated Historic Properties which could result from private or public projects requiring discretionary City actions.

***Policy 3.5: Historic preservation and discretionary permit approvals*.** For additions or alteration to Heritage Properties[6] or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design matches or is compatible with, but not necessarily identical to, the property's existing or historical design; or (2) the proposed design comprehensively modifies and is at least equal in quality to the existing design and is compatible with the character of the neighborhood; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

For any project involving complete demolition of Heritage Properties or Potential Designated Historic Properties requiring discretionary City permits, the City will make a finding that: (1) the design quality of the proposed project is at least equal to that of the original structure and is compatible with the character of the neighborhood; or (2) the public benefits of the proposed project outweigh the benefit of retaining the original

[6] Heritage Properties are defined in Appendix A of the City of Oakland Historic Preservation Element as "properties which under Policy 2.5 appear potentially eligible for Landmark or Preservation District designation because they either (1) have received an existing or contingency rating of 'A' (Highest Importance), 'B' (Major Importance), or 'C' (Secondary Importance) from the Intensive Survey; (2) have received an existing or contingency rating of 'A' or 'B' from the Reconnaissance Survey; or (3) contribute or potentially contribute to any area potentially eligible for Preservation District Designation."

structure; or (3) the existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

***Policy 3.7: Property relocation rather than demolition as part of discretionary projects.*** As a condition of approval for all discretionary projects involving demolition of existing or Potential Designated Historic Properties, the City will normally require that reasonable efforts be made to relocate the properties to an acceptable site.

***Policy 3.8: Definition of "Local Register of Historical Resources" and historic preservation "Significant Effects" for environmental review purposes.*** For purposes of environmental review under the California Environmental Quality Act, the following properties will constitute the City of Oakland's Local Register of Historic Resources:

1. All Designated Historic Properties [Landmarks, Heritage Properties, Study List Properties, Preservation Districts, and S-7 and S-20 Preservation Combining Zone Properties]; and

2. Those Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance (API).

Until complete implementation of Action 2.1.2 (Redesignation), the Local Register of Historical Resources will also include the following designated properties: Oakland Landmarks, S-7 Preservation Combining Zone properties, and Preservation Study List properties.

Complete demolition of a Historical Resource will normally be considered a significant effect that cannot be mitigated to a level less than significant and will, in most cases, require preparation of an Environmental Impact Report.

A proposed addition or alteration to a Historical Resource that has the potential to disqualify a property from Landmark or Preservation District eligibility or may have substantial adverse effects on the property's Character-Defining Elements will normally, unless adequately mitigated, be considered to have a significant effect. Possible mitigation measures are suggested in Action 3.8.1.

***Policy 3.13: Security of vacant properties.*** Vacant or abandoned existing or Potential Designated Historic Properties shall be adequately secured in order to prevent unauthorized entry, theft, or property damage.

***Policy 4.1: Archaeological resources.*** To protect significant archaeological resources, the City will take special measures for discretionary projects involving ground disturbances located in archaeologically sensitive areas.

The OCHS is an ongoing survey process conducted by the City of Oakland. It began in 1979 and uses a five-tier rating system for individual properties, ranging from "A" (highest importance) and "B" (major importance) to "E" (of no particular interest). This letter rating is termed the "Individual Property Rating" of a building and is based on the following criteria:

1. **Visual Quality/Design:** Evaluation of exterior design, interior design, materials and construction, style or type, supporting elements, feelings of association, and importance of designer.

2. **History/Association:** Association of person or organization, the importance of any event, association with patterns of history, and the age of the building.

3. **Context:** Continuity and familiarity of the building within the city, neighborhood, or district.
4. **Integrity and Reversibility:** Evaluation of the building's condition, its exterior and interior alterations, and any structural removals.

### Central Estuary Area Plan

The Central Estuary Area Plan (CEAP) was adopted in 2013 to guide development of the area generally encompassed by 19th Avenue to the north, 54th Avenue to the south, I-880 to the east, and the Oakland Estuary to the west. Due to a wide variety of conditions, the plan area is divided into 10 sub-districts, and the Project site is located in the Owens Brockway Sub-district. The CEAP contains the following objectives and policies that address issues related to historic architectural resources (Community Design + Architecture, 2013).

**Objective LU-5:** Provide for the orderly transformation of land uses while acknowledging and respecting cultural and historical resources.

**Objective LU-6:** Create greater land use continuity between the estuary waterfront and adjacent inland districts.

**Objective SA-6:** Encourage the development of educational and cultural programs and interpretive facilities that enhance understanding of the waterfront environment.

**Policy CE-5:** Allow the existing industrial use of the Owens-Brockway site.

## City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval

The City's Standard Conditions of Approval (SCAs) relevant to reducing impacts on cultural resources and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to cultural resources. Because the SCAs are incorporated as part of the Project, they are not listed as mitigation measures.

**SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** (*Standard Condition of Approval 32*)

**Requirement:** Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented.

In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense.

In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant.

**SCA CUL-2: Human Remains – Discovery During Construction.** (*Standard Condition of Approval 34*)

**Requirement:** Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant.

Typically, Standard Condition of Approval (SCA) #35, Property Relocation, below, is applied when a PDHP is present on a property and proposed for demolition. However, due to the size of the existing buildings on the Project site and the contamination inherent in the building materials, it is not practical or feasible to relocate the buildings. Therefore, SCA 35 is not being imposed on this Project.

**SCA 35: Property Relocation.**

**Requirement:** Pursuant to Policy 3.7 of the Historic Preservation Element of the Oakland General Plan, the project applicant shall make a good faith effort to relocate

the historic resource to a site acceptable to the City. A good faith effort includes, at a minimum, all of the following:

a. Advertising the availability of the building by: (1) posting of large visible signs (such as banners, at a minimum of 3' x 6' size or larger) at the site; (2) placement of advertisements in Bay Area news media acceptable to the City; and (3) contacting neighborhood associations and for-profit and not-for-profit housing and preservation organizations;

b. Maintaining a log of all the good faith efforts and submitting that along with photos of the subject building showing the large signs (banners) to the City;

c. Maintaining the signs and advertising in place for a minimum of 90 days; and

d. Making the building available at no or nominal cost (the amount to be reviewed by the Oakland Cultural Heritage Survey) until removal is necessary for construction of a replacement project, but in no case for less than a period of 90 days after such advertisement.

## 4.7.4.5 Project Impacts and Discussion

### *Historic Architectural Resources*

**Impact CUL-1: The Project would not cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5. (Criterion 1) (*Less than Significant*)**

Potential impacts on historical resources are assessed by identifying any activities (either during construction or operation) that could affect resources that have been identified as historical resources for the purposes of CEQA. Once a resource has been identified, it then must be determined whether the proposed Project would "cause a substantial adverse change in the significance" of the resource, as described above. As such, per CEQA Guidelines section 15064.5(b)(2), the following analysis considers the potential for the Project to materially impair the significance of a historical resource by causing direct or indirect changes to the physical characteristics of the resource that convey its historical significance.

The Project site was reevaluated in 2021 and former Owens-Illinois Plant 20 was found to possess significance as a historic district. However, the plant experienced a substantial loss of historic materials over the course of several decades, and currently lacks integrity as a resource. As such, City of Oakland preservation planning staff determined that the plant is ineligible for listing in the California Register. It was also recommended for classification as a C-rated building (i.e., a property of Secondary Importance) according to the OCHS criteria, and City of Oakland preservation planning staff concurred with this recommendation. For these reasons, the Project site does not qualify as a historical resource for the purposes of CEQA or a historic property according to Section 17.158.090 of the City of Oakland Planning Code. As presented above in Section 4.7.4.2, *Environmental Setting*, the adjacent properties do not meet the conditions established in Section 17.158.090 for consideration as historical resources for the purposes of CEQA and the Project site does not appear to be part of an industrial plant historic district. Therefore, the Project would not result in any impacts to historic architectural resources.

**Mitigation:** None required.

---

### *Archaeological Resources*

**Impact CUL-2: The Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. (Criterion 2) (*Less than Significant with SCAs*)**

This analysis addresses archaeological resources, both as historical resources according to CEQA Guidelines Section 15064.5, as well as unique archaeological resources, as defined in PRC Section 21083.2(g). A significant impact would occur if the Project were to cause a substantial adverse change to an archaeological resource through physical demolition, destruction, relocation, or alteration of the resource.

Based on the background research and previous disturbance in the Project site, there is a low potential to impact prehistoric and historic-era archaeological resources. While unlikely, the possibility of encountering cultural materials during Project ground-disturbing activities cannot be entirely discounted. Impacts to previously undiscovered archaeological resources would be potentially significant. SCA CUL-1, Archaeological and Paleontological Resources – Discovery During Construction, would reduce impacts by requiring all work to halt within 50 feet of an inadvertent discovery of any subsurface archaeological materials and a qualified archaeologist to assess the significance of the find according to regulatory guidance. Implementation of SCA CUL-1 would ensure that appropriate procedures are followed, and the impact would be reduced to a less-than-significant level.

**SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.**

**Mitigation:** None required.

---

### *Human Remains*

**Impact CUL-3: The Project would not disturb any human remains, including those interred outside of formal cemeteries. (Criterion 3) (*Less than Significant with SCAs*)**

There is no indication from the background research that the Project site was used for human burial purposes and the potential to encounter human burials during Project implementation is low.

While unlikely, the possibility of encountering human remains during Project ground-disturbing activities cannot be entirely discounted. Impacts to human remains would be potentially significant. SCA CUL-2, Human Remains – Discovery During Construction, would reduce impacts by requiring all work to halt within 50 feet of an inadvertent discovery of any human remains and the Project Applicant to notify the City and the Alameda County Coroner, who would determine whether an investigation of the cause of death is required or if the remains are

Native American in origin. Implementation of SCA CUL-2 would ensure that appropriate regulatory procedures are followed, and the impact would be reduced to a less-than-significant level.

**SCA CUL-2: Human Remains – Discovery During Construction.**

**Mitigation:** None required.

---

## 4.7.4.6 Cumulative Impacts

### *Historic Architectural Resources*

**Impact CUL-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not contribute to cumulative adverse impacts on historical resources. (*Less than Significant*)**

According to the May 2022 map of current projects (Appendix B), the only cumulative project within this area is a sound wall at 3927 Wattling Street. This minor project, which would construct a new 904-foot long, 16-foot tall sound wall separating a new residential development from the railroad, was approved in October 2019 and would not result in any impact to historic architectural resources. As discussed above, the Project would not result in any impacts to historical resources and therefore, would not contribute to any potential cumulative impact on historic resources within the City of Oakland. No mitigation is required.

---

### *Archaeological Resources and Human Remains*

**Impact CUL-2.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not contribute to cumulative adverse impacts on archaeological resources and human remains. (*Less than Significant with SCAs*)**

The geographic scope for cumulative effects on archaeological resources includes the immediate vicinity of locations where the Project could cause disturbance to these resources. Similar to the Project, cumulative projects in the vicinity could have a significant impact on previously undiscovered archaeological resources, including human remains interred outside of formal cemeteries, during ground-disturbing activities. The potential impacts of the Project when considered together with similar impacts from other probable future projects in the vicinity could result in a significant cumulative impact on archaeological resources or human remains. However, implementation of SCA CUL-1 and SCA CUL-2 would require that work halt in the vicinity of a find until it is evaluated by a qualified archaeologist, and in the case of human remains the Alameda County Coroner. In addition, cumulative projects undergoing CEQA review would also include these SCAs. Therefore, with implementation of SCA CUL-1 and SCA CUL-2, the Project's contribution to cumulative impacts would not be considerable, and the impact would be less than significant.

**SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.**

**SCA CUL-2: Human Remains – Discovery During Construction.**

**Mitigation:** None required.

---

## 4.7.4.7 References

City of Oakland. 1998. *Historic Preservation Element of the Oakland General Plan*. March 8, 1994, amended July 21, 1998.

City of Oakland. 2020. *City of Oakland CEQA Thresholds of Significance Guidelines*. March 3, 2022.

Community Design + Architecture. 2013. *Central Estuary Area Plan.* Prepared for the City of Oakland Department of Planning and Building. April 5, 2013. Accessed March 3, 2022. https://cao-94612.s3.amazonaws.com/documents/oak040389.pdf.

Environmental Science Associates (ESA), 2021. *Revised Draft: Peer Review of Historic Resource Evaluation for Owens-Illinois Plant 20, 3600 Alameda Avenue.* Prepared for the City of Oakland. January 26, 2022. (Appendix L)

Graymer, R.W. 2000. *Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California.* U.S. Geological Survey Miscellaneous Field Studies Map MF-2342. Scale 1:50,000. Accessed January 20, 2022. https://pubs.usgs.gov/mf/2000/2342/.

Kleinfelder. 2021. *Geotechnical Investigation Report, Industrial Warehouse Site; 3600 Alameda Avenue, Oakland, California.* Project No. 20214267.001A. May 26, 2021. Accessed January 20, 2022.

Levy, Richard S. Costanoan. In *California*, edited by R.F. Heizer, Volume 8. Handbook of North American Indians, W.G. Sturtevant, general editor. Smithsonian Institution, Washington D.C. 1978, pp. 485–497.

LSA Associates, Inc. (LSA). 2017. *GE Demolition – International Boulevard Draft Environmental Impact Report*. Prepared for the City of Oakland Department of Planning and Building, Bureau of Planning, February 2017. Accessed March 3, 2022. https://oaklandca.s3.us-west-1.amazonaws.com/government/o/PBN/OurServices/Application/oak062800.pdf.

LSA. 2021. *Preliminary Findings of the former Owens-Brockway (Owns-Illinois) Glass Facility at 3600 Alameda Avenue, Oakland, California.* Prepared for Kimley-Horn and Associates, Inc. May 20, 2021. (Appendix L)

Meyer, Jack, and Jeffrey Rosenthal. *Geoarchaeological Overview of the Nine Bay Area Counties in Caltrans District 4*. Prepared for Caltrans District 4, 2007.

Milliken, Randall. *A Time of Little Choice*. Ballena Press Anthropological Papers No. 43. 1995.

Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottfield, Donna Gillette, Vaviana Bellifemine, Eric Strother, Robert Cartier, and David A. Fredrickson. 2007. Punctuated Culture Change in the San Francisco Bay Area. In *Prehistoric California: Colonization, Culture, and Complexity.* Edited by T.L. Jones and K.A. Klar. AltaMira Press, pp. 99–124.

Northwest Information Center (NWIC) of the California Historical Resources Information System. 2022. Database Search File No. 21-1575. Results on file at ESA. April 12, 2022.

Oakland Cultural Heritage Survey (OCHS). 1995. *California Department of Parks and Recreation (DPR) 523 Primary Record for the Owens Illinois Pacific Coast Glass Factory, 3600 Alameda Avenue, Oakland, California*. September 30, 1995.

Page & Turnbull. 2021. *Historic Resource Evaluation for Owens-Illinois Plant 20, 3600 Alameda Avenue.* Prepared for Duke Realty. December 17, 2021. (Appendix L)

*San Francisco Examiner*. "Motor Engine Spark Starts $250,000 Fire." December 18, 1913, p. 6.

U.S. Department of the Interior, National Park Service (National Park Service). 2017. The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstruction Historic Buildings. Kay D. Weeks and Anne E. Grimmer. 1995, revised 2017. Accessed March 3, 2022. http://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf.

U.S. Geological Survey (USGS). 1897. Concord, 1:62,500 Topographic Quadrangle Map, 1897.

USGS. 1915. Concord, 1:62,500 Topographic Quadrangle Map, 1915.

# 4.7.5 Energy

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **VI. ENERGY —** Would the Project: | | | | |
| 1) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; | ☐ | ☐ | ☒ | ☐ |
| 2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency; | ☐ | ☐ | ☒ | ☐ |
| 3) Violate applicable federal, state and local statutes and regulations relating to energy standards; or | ☐ | ☐ | ☒ | ☐ |
| 4) Result in a determination by the energy provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects. | ☐ | ☐ | ☒ | ☐ |

## 4.7.5.1 Environmental Setting

The Project site is located within Pacific Gas and Electric's (PG&E) service area for electricity. PG&E delivered approximately 78.5 billion kilowatt-hours (kWh) throughout its service area in 2020. In Alameda County, approximately 10.2 billion kWh of electricity was consumed in 2020, with approximately 6.9 billion kWh consumed by non-residential uses (California Energy Commission [CEC], 2021). The California Energy Commission estimates that 442 million gallons of gasoline and approximately 104 million gallons of diesel were sold to customers in Alameda County in 2020 (CEC, 2020).

The East Bay Community Energy (EBCE) is a community-governed, local power supplier that provides low-carbon electricity to Oakland residents and businesses under Alameda County's community choice energy (CCE) program at rates that are lower or comparable to PG&E's rates. Under a CCE program, the utility company (in this case PG&E) continues to operate and service the transmission and delivery system and provides billing and customer service. EBCE's standard electricity product that has a higher renewable energy content than PG&E at rates marginally lower than PG&E's base offering. It also provides a 100 percent renewable product at a rate equivalent to PG&E's base offering.

## 4.7.5.2 Regulatory Setting

### *Renewables Portfolio Standard*

Senate Bill 100, as part of California's Renewables Portfolio Standard (RPS) program, sets a target for retail sellers of electricity, including investor-owned utilities and community choice aggregators to provide 60 percent of their electricity from renewable resources by December 31, 2030, and further amends the RPS statute to set a policy of meeting 100 percent of retail sales

from eligible renewables and zero-carbon resources by December 31, 2045. The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program.

### *California Building and Energy Efficiency Standards (Title 24)*

The California Energy Commission first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce emissions of criteria pollutants or TACs, increased energy efficiency and reduced consumption of natural gas and other fuels would result in fewer criteria pollutant and TAC emissions from residential and non-residential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods (California Energy Commission, 2018).

The Title 24, Part 6, standards became effective on January 1, 2017. The most recent update to the Title 24 energy efficiency standards (2019 standards) went into effect on January 1, 2020.[7] The Project would adhere to the applicable version of Title 24 as conditions of approval for site development and planned development permits, grading permits, and demolition permits.

### *California Green Standards Building Code*

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The CALGreen Code is intended to encourage more sustainable and environmentally friendly building practices, require low-pollution emitting substances that cause less harm to the environment, conserve natural resources, and promote the use of energy-efficient materials and equipment.

Since 2011, the CALGreen Code has been mandatory for all new residential and non-residential buildings constructed in the state. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design, and overall environmental quality. The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential and non-residential uses; the new measures took effect on January 1, 2020.

### *Construction Equipment Idling*

The California Air Resources Board has also adopted a regulation for in-use off-road diesel vehicles that is designed to reduce emissions from diesel-powered construction vehicles by imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The regulation requires an operator of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to no more than 5 minutes.

[7] This Draft EIR describes the most recent update to Title 24 at the time the NOP for this Draft EIR was published in April 2022. Project construction would be required to adhere to any more recent updates to Title 24.

### *City of Oakland General Plan*

The Open Space, Conservation and Recreation (OSCAR) Element of the Oakland General Plan describes the following policies regarding energy resources, adopted for the purpose of avoiding or mitigating an environmental effect, and that apply to the Project (City of Oakland, 1996).

> **Objective CO-13: Energy Resources.** To manage Oakland's energy resources as efficiently as possible, reduce consumption of non-renewable resources, and develop energy resources which reduce dependency on fossil fuels.
>
> > ***Policy CO-13.3: Construction Methods and Materials.*** Encourage the use of energy-efficient construction and building materials. Encourage site plans for new development which maximize energy efficiency.
> >
> > ***Policy CO-13.4: Alternative Energy Sources.*** Accommodate the development and use of alternative energy resources, including solar energy and technologies which convert waste or industrial byproducts to energy, provided that such activities are compatible with surrounding land uses and regional air and water quality requirements.

### *City of Oakland GHG Reduction Targets and Climate Action Plan*

In October 2018, the Oakland City Council passed Resolution 87183 adopting an interim citywide GHG emissions reduction target of 56 percent below 2005 levels by the year 2030 to keep the City on track to meet its 2050 target.

In July 2020, via Resolution 88267, Oakland City Council adopted the 2030 Equitable Climate Action Plan (ECAP), a comprehensive plan to achieve the 2030 GHG reduction target and increase Oakland's resilience to the impacts of the climate crisis, both through a deep equity lens (City of Oakland, 2020a). Alongside the 2030 ECAP, Council also adopted a goal to achieve community-wide carbon neutrality no later than 2045 (City of Oakland, 2020b). Achieving carbon neutrality will require complete decarbonization (ensuring that all mechanical systems run on clean electricity) of Oakland's building sector.

### *City of Oakland Municipal Code for Plug-in Electric Vehicle Charging Stations*

As of March 2017, Chapter 15.04, Article II, Part 11 of the City's Municipal Code requires all new multifamily and non-residential buildings to include full circuit infrastructure for plug-in electric vehicle (PEV) charging stations for at least 10 percent of the total parking spaces. In addition, inaccessible conduits for future expansion of PEV spaces must be installed for 10 percent of the total parking at non-residential buildings. The new requirements are designed to accelerate the installation of vehicle chargers to address demand.

### *City of Oakland Ordinance Requiring All-Electric Construction In Newly Constructed Buildings*

On December 1, 2020, the City of Oakland adopted Ordinance 13632 prohibiting newly constructed buildings (both residential and commercial) from connecting to natural gas or propane, thus eliminating it for any use in new buildings without justifying a waiver. Newly constructed buildings must use a permanent supply of electricity as the source of energy for all appliances. The prohibition does not affect existing buildings, renovations or additions made to a

structure, including attached accessory dwelling units. The ban includes a waiver for developers who can demonstrate that it is not feasible for a new building to go 100 percent electric.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to various resource areas. Although there are no SCAs that are directly related to energy-use, there are various air quality-, utility and service system-, and transportation and traffic-related SCAs that would indirectly mitigate energy impacts. These include air quality, greenhouse gas, and transportation related SCAs. Because conditions of approval are incorporated as part of the Project, they are not listed as mitigation measures.

## 4.7.5.3 Project Impacts and Discussion

**Impact ENE-1: Construction and operation of the Project would not result in potentially significant environmental impact due to the wasteful, inefficient, and/ or unnecessary use of energy, and adequate capacity would be available to serve the Project's demand. (Criteria 1 and 4) (*Less than Significant with SCAs*)**

The analysis in this section utilizes the assumptions identified in Appendix C, *Air Quality and Health Risk Assessment Information*. Because the California Emissions Estimator Model (CalEEMod) program used in this technical report does not provide the amount and fuel type for construction-related sources, additional calculations were conducted to estimate fuel use and are summarized below with details provided in Appendix M, *Project Energy Calculations*.

### Construction

During construction the Project would result in the consumption of fuel in construction equipment, haul-truck trips, building material delivery vendor trips, and worker trips to and from the Project site. The Project's estimated fuel consumption during construction is summarized in **Table 4.7.5-1**. Project construction is expected to consume a total of approximately 77,560 gallons of diesel fuel from construction equipment, haul-truck trips, and vendor-truck trips, and approximately 23,181 gallons of gasoline from construction worker vehicle trips. Project fuel use during construction would represent less than 0.01 percent of both gasoline and diesel sales in Alameda County in 2020 (CEC, 2020).

**TABLE 4.7.5-1**
**PROJECT ENERGY CONSUMPTION DURING CONSTRUCTION**

| Type (use) | Quantity | Units |
|---|---|---|
| Diesel (construction equipment and trucks) | 77,560 | gallons |
| Gasoline (worker vehicles) | 23,181 | gallons |

NOTES: kWh = kilowatt-hours

SOURCE: Data compiled by Environmental Science Associates in 2021 (Appendix M).

SCA AIR-2, Criteria Air Pollutant Controls - Construction Related, requires limiting idling from diesel-fueled off-road vehicles over 25 horsepower and construction vehicles to two minutes, which would reduce the wasteful, inefficient, or unnecessary consumption of fuel during Project construction. Additionally, SCA AIR-2 requires portable equipment to be powered by grid electricity if available, and diesel engines are only allowed if grid electricity is not available and propane or natural gas generators cannot meet the electrical demand.

Construction activities and corresponding fuel energy consumption would be temporary and localized. In addition, there are no unusual Project characteristics that would cause the use of construction equipment that would be less energy efficient compared with other similar construction sites in other parts of the City. Therefore, construction-related fuel consumption by the Project would not result in inefficient, wasteful, or unnecessary energy and the impact would be less-than-significant.

### Operation

Consistent with the City's adopted ordinance prohibiting newly constructed buildings (both residential and commercial) from connecting to natural gas or propane (Ordinance 13632), the Project would use no natural gas for operation. Therefore, the Project would have no impact on natural gas supplies.

The following analysis conservatively excludes the energy savings from rooftop solar collectors proposed to be installed on 25 percent of the roof area. The Project's annual energy and fuel consumption that would occur during operation is summarized in **Table 4.7.5-2**. The Project would receive service power from PG&E and would have an emergency diesel generator available on-site. CalEEMod estimates were used to determine the electricity demand from the Project. The electricity demand from the Project was estimated to be 2,680 MWhr per year, which includes Project building-related energy use. Electricity associated with the Project's water consumption was estimated to be 360 MWh per year[8], for a total electricity demand of approximately 3,404 MWhr per year when combined with estimated building electricity demand. For reference, the Project's annual electricity demand represents less than 0.03 percent of the total electricity consumed in the PG&E service area in 2021, and 0.04 percent of non-residential electricity consumed in Alameda County in 2021 (CEC, 2021).

Additionally, the Project would seek LEED Silver level certification consistent with the City's Green Building Requirements, and would comply with the CALGreen Code, and Title 24 building energy and water efficiency requirements. SCA UTIL-3, Green Building Requirements, would ensure implementation of all mandatory City green building requirements and CALGreen measures. Project compliance with these regulations would ensure that the Project's building-related energy use would not be inefficient, wasteful, or unnecessary.

[8] Based on the CalEEMod energy intensity of 0.0035 kWh per gallon for supply, distribution, and treatment of water for Alameda County.

**TABLE 4.7.5-2**
**PROJECT ANNUAL ENERGY CONSUMPTION DURING OPERATION**

| Type (use) | Quantity | Units |
|---|---|---|
| **Electricity** | | |
| Building | 2,683,943 | kWh/year |
| Water-related | 359,251 | kWh/year |
| **Total** | **2,550,122** | kWh/year |
| **Gasoline** | | |
| Vehicle trips | 210,787 | gallons/year |
| **Diesel** | | |
| Emergency Generator | 653 | gallons/year |
| Vehicle Trips | 145,105 | gallons/year |
| **Total** | **145,758** | **gallons/year** |

NOTES: kWh = kilowatt-hours
SOURCE: Data compiled by Environmental Science Associates in 2021 (Appendix C and Appendix M).

Project operation would also involve energy demand from gasoline fuel used by employees traveling to and from the Project site. Using the total CalEEMod mobile emissions rates (see Appendix C) during operations yields a conservative estimate of 221,958 gallons of gasoline required annually during Project operation. The gasoline consumption by Project employees during operation would represent less than 0.01 percent of Alameda County's gasoline sales in 2020 (CEC, 2020). Further, the Project would be required to implement SCAs TRANS-2, Bicycle Parking; TRANS-3, Transportation and Parking Demand Management, and TRANS-4, Plug-In Electric Vehicle (PEV) Charging Infrastructure which would reduce the amount of gasoline consumed during Project operation by facilitating and encouraging alternative travel modes. The nature of the Project as a distribution warehouse would generate truck trips that would run on diesel fuel, in addition to the passenger vehicle trips discussed above. Diesel-fueled vehicles associated with Project operation would consume approximately 135,500 gallons of diesel fuel per year, which represents less than 0.01 percent of diesel fuel sales in Alameda County in 2020 (CEC,2020). The diesel fuel used for emergency generator maintenance and testing would also be minimal and represent less than 0.01percent of diesel fuel sold in the County in 2020 (CEC, 2020). Therefore, the energy demand from the operation of the Project would not result in wasteful, inefficient and unnecessary use of energy. This impact would be less than significant.

The Project site is currently supplied electricity by PG&E and EBCE. PG&E and EBCE have established contracts and commitments to ensure there is adequate electricity generation capacity to meet its current and future energy loads. The Project would consume electricity typical of other industrial and/or commercial development in the Project vicinity and is already supplied by PG&E and EBCE. Therefore, the Project would not result in a determination by PG&E or EBCE that it does not have adequate capacity to serve the Project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.

**SCA AIR-2: Criteria Air Pollutant Controls - Construction Related.** See Section 4.1.3.

**SCA GHG-1: SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan.** See Section 4.3.2.

**SCA TRANS-2: Bicycle Parking.** See Section 4.6.2.

**SCA TRANS-3: Transportation and Parking Demand Management.** See Section 4.6.2.

**SCA TRANS-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure.** See Section 4.6.2.

**SCA UTIL-3: Green Building Requirements.** See Section 4.7.14.

**Mitigation:** None required.

---

**Impact ENE-2: The Project would not conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards. (Criteria 2 and 3) (*Less than Significant with SCAs*)**

As discussed under Impact ENE-1 above, the Project would seek LEED Silver level certification consistent with the City's green building requirements, and would comply with the CALGreen Code, and Title 24 building energy and water efficiency requirements. Implementation of SCA UTIL-3, Green Building Requirements, would ensure all applicable City green building requirements are met. Consistent with the City's adopted ordinance prohibiting newly constructed buildings (both residential and commercial) from connecting to natural gas, the Project would not include natural gas infrastructure (see Appendix F). This would result in an increase in electricity consumption. Electricity providers PG&E and EBCE are required to comply with the RPS standards which would allow the Project to receive energy from more renewable sources. Therefore, the Project would not conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards and the impact would be less than significant.

**SCA GHG-1: SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan.** See Section 4.3.2.

**SCA UTIL-3: Green Building Requirements.** See Section 4.7.14.

**Mitigation:** None required.

---

### 4.7.5.4 Cumulative Impacts

**Impact ENE-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative energy impacts. (*Less than Significant with SCAs*)**

The geographic context for potential cumulative impacts related to electricity is within PG&E's service area. For potential cumulative impacts related to vehicle and construction equipment fuel use, the geographic context is within Alameda County, the area within which fuel would be demanded by and supplied to the Project. As described under Impact ENE-1, the Project's electricity use would represent a small fraction of the total electricity usage in the PG&E service area, as well as non-residential uses in Alameda County. The Project's use of fuel resources during construction and operation would represent marginal increases in fuel consumption when compared to County gasoline and diesel sales. Implementation of SCAs AIR-2, GHG-1, TRANS-2, TRANS-3, TRANS-4, and UTIL-4 would ensure that the Project would not result in wasteful, inefficient, and unnecessary use of energy resources and would not contribute to a cumulatively considerable impact.

Additionally, as described under Impact ENE-2, the Project would not conflict with or obstruct adopted energy conservation plans or violate energy efficiency standards, nor would it cause a significant environmental effect due to compliance with fuel and energy efficiency regulations, and a LEED Silver building design per the requirements of SCA UTIL-3. Cumulative development would also be subject to green building and other energy efficiency regulations. Therefore, the Project's less than significant energy impacts would not be cumulatively considerable.

> **SCA AIR-2: Criteria Air Pollutant Controls – Construction Related.** See Section 4.1.3.
>
> **SCA GHG-1: SCA GHG-1: Greenhouse Gas (GHG) Reduction Plan.** See Section 4.3.2.
>
> **SCA TRANS-2: Bicycle Parking.** See Section 4.6.2.
>
> **SCA TRANS-3: Transportation and Parking Demand Management.** See Section 4.6.2.
>
> **SCA TRANS-4: Plug-In Electric Vehicle (PEV) Charging Infrastructure.** See Section 4.6.2.
>
> **SCA UTIL-3: Green Building Requirements.** See Section 4.7.14.
>
> **Mitigation:** None required.

---

### 4.7.5.5 References

California Energy Commission (CEC). 2020. *2020 California Annual Retail Fuel Outlet Report Results (CEC-A15)*. August 31, 2020. Accessed January 31, 2022. https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting.

CEC. 2021. Electricity Consumption by County. Accessed March 13, 2023. http://www.ecdms.energy.ca.gov/elecbycounty.aspx.

City of Oakland. 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*. Adopted June 11, 1996. Accessed January 31, 2022. https://cao-94612.s3.amazonaws.com/documents/oak035254.pdf.

# 4.7.6 Geology, Soils, and Paleontological Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **VII. GEOLOGY AND SOILS —** The Project would have a significant impact on the environment if it would expose people or structures to geologic hazards, soils, and/or seismic conditions so unfavorable that they could not be overcome by special design using reasonable construction and maintenance practices. Specifically: | | | | |
| 1) Expose people or structures to substantial risk of loss, injury, or death involving: | | | | |
| a) 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;[9] | ☐ | ☐ | ☐ | ☒ |
| b) Strong seismic ground shaking; | ☐ | ☐ | ☒ | ☐ |
| c) Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse; or | ☐ | ☐ | ☒ | ☐ |
| d) Landslides; | ☐ | ☐ | ☐ | ☒ |
| 2) Result in substantial soil erosion or the loss of topsoil, creating substantial risks to life, property, or creeks/waterways; | ☐ | ☐ | ☒ | ☐ |
| 3) Be located on expansive soil, as defined in section 1802.3.2 of the California Building Code (2007, as it may be revised), creating substantial risks to life or property; | ☐ | ☐ | ☒ | ☐ |
| 4) Be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property; | ☐ | ☐ | ☒ | ☐ |
| 5) Be located above landfills for which there is no approved closure and post-closure plan, or unknown fill soils, creating substantial risks to life or property; or | ☐ | ☐ | ☐ | ☒ |
| 6) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or | ☐ | ☐ | ☐ | ☒ |
| 7) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. | ☐ | ☐ | ☒ | ☐ |

## 4.7.6.1 Environmental Setting

Kleinfelder prepared a Geotechnical Investigation Report for the Project in 2021. The purpose of their investigation was to evaluate the site's subsurface conditions at selected locations to obtain data and develop conclusions and geotechnical recommendations to be utilized during the design and construction of the Project. In addition to geotechnical recommendations for the Project, this report includes environmental setting details on regional and site geology as well as faulting and

[9] **NOTE**: Refer to California Geological Survey 42 and 117 and Public Resources Code section 2690 et. seq.

seismicity and its effects on liquefaction, lateral spreading, and dynamic compaction. This setting is described in further detail below.

The Project site lies within the geologically complex region of California referred to as the Coast Range Geomorphic Province. This area geologically consists of a series of northwest trending mountains and valleys. The Project site is located on the East Bay flatlands. The complex geology of this regional area includes a history of sedimentation, volcanism, folding, faulting uplift, and erosion which has resulted in fractured and discontinuous sedimentary deposits.

The Quaternary Geologic map of the area indicates that the entire site is located in a small fan of Holocene-age Younger alluvial fan deposits stemming from the open portion of Sausal Creek, located about 2/3 mile north of the site (Graymer, 2000; Kleinfelder, 2021). The USACE created the present-day Tidal Canal, which connects the Oakland Estuary to San Leandro Bay along the former San Antonia Creek.

## *Geologic and Seismic Hazards*

### Seismicity

The San Francisco Bay Area is a seismically active region in California. While there are several active faults in the Bay Area, there are none that cross the Project site, and the Project site is not within an Earthquake Fault Zone (EFZ), as delineated by the California Geological Survey (CGS, 2003) in accordance with the Alquist-Priolo Earthquake Fault Zone Act of 1972. The risk of surface fault rupture at the Project site is considered low to negligible due to the lack of any faults crossing the Project site (Kleinfelder, 2021).

While there is little risk of fault rupture at the site, moderate to major seismic ground shaking is a potential risk due to the proximity of active faults. Of the various active faults in the region, the nearest zoned active fault is the Hayward-Rodgers Creek fault located approximately 2.75 miles northeast of the site. The Hayward-Rodgers Creek fault is characterized by three segments and six rupture scenarios, the most severe of which is characterized to be a magnitude 7.6 (USGS, 2010). Although not considered to be active by the USGS, the Chabot, Miller Creek, and Moraga faults are also near the Project site at approximately 3.73, 5.75, and 6.5 miles northeast of the site respectively. Future seismic events in this region can be expected to produce strong seismic ground shaking at the Project site and the intensity of future shaking will depend on the distance from the site to the earthquake focus, magnitude of the earthquake, and the response of the underlying soil and bedrock (Kleinfelder, 2021).

### Liquefaction

Liquefaction is the rapid loss of shear strength experienced in saturated, predominantly loose granular soils below the groundwater level during strong earthquake ground shaking. Earthquake-induced liquefaction is defined as a significant loss of soil strength and stiffness caused by an increase in pore water pressure resulting from continuous application of a load during shaking. Liquefaction is most prevalent in loose to medium dense, sandy, and gravelly soils below the groundwater level. However, this process can also occur in non-plastic to low-plasticity, finer

grained soils. The occurrence of this phenomenon is dependent on many complex factors, including the intensity and duration of ground shaking, particle size distribution, and density of the soil.

The potential damaging effects of liquefaction to engineered structures include the loss of bearing capacity, buoyancy forces on underground structures, ground oscillations or "cyclic mobility", increased lateral earth pressures on retaining walls, liquefaction settlement, and lateral spreading or "flow failures" in slopes. Dynamic settlement (i.e., pronounced consolidation and settlement from seismic shaking) may also occur in loose, dry sands above the water table, resulting in settlement of and possible damage to overlying structures. In general, a relatively high potential for liquefaction exists in loose, sandy soils that are within 40-feet of the ground surface and are saturated (below the groundwater table). Lateral spreading can move blocks of soil, placing strain on buried pipelines that can lead to leaks or pipe failure.

The Project site is located within a State of California Seismic Hazard Zones map (CGS, 2003) for liquefaction where areas of historical occurrence of liquefaction, or local geological, geotechnical, and ground-water conditions indicate a potential for permanent ground displacements such that mitigation, as defined in Public Resources Code Section 2693(c), would be required (CGS, 2003). In 2021, Kleinfelder presented geotechnical recommendations for site grading and foundation design for the Project in a Geotechnical Investigation Report (Geotech Report). The conclusions and recommendations presented in the Geotech Report were based on a site reconnaissance, subsurface exploration and laboratory testing programs, review of published geologic and seismic studies, geotechnical analyses, and Kleinfelder staff experience in the site area (Kleinfelder, 2021). The Geotech Report includes results from a detailed liquefication analysis, the results of which indicate that several thin soil layers below the groundwater depth (8 to 10 feet below the current ground surface) are considered potentially liquefiable. However, the subsurface soil conditions are variable across the site and these thin layers are not uniform or continuous across the building footprint at the site. Thus, the Geotech Report indicates that due to the depth and/or thickness of potentially liquefiable layers, it is not expected that liquefaction induced damage is to occur at this site.

Lateral spreading, which is commonly associated with liquefaction, is where extensional ground cracking and settlement occurs as a response to lateral migration of subsurface materials. This phenomenon typically occurs adjacent to steeply inclined layers of rock such as slopes and creek channels. The Geotech Report indicates that the potential for this phenomenon affecting the Project site is low after taking into consideration the subsurface conditions and the distance of the building to a steeply inclined layer of rock at the Tidal Canal.

Another seismically induced ground failure that can occur as a result of seismic shaking is dynamic compaction, which is also known as seismic settlements. This phenomenon typically occurs in unsaturated, loose granular material or uncompacted fill soils. The Geotech Report concluded that the potential for shaking-related dynamic compaction is low because the soils above the estimated groundwater depth of 8 to 10 feet are predominantly cohesive soils.

### Expansive and Corrosive Soils

Expansive soils are soils that possess a "shrink-swell" characteristic, also referred to as linear extensibility. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying; the volume change is reported as a percent change for the whole soil. Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, or perched groundwater.[10] Expansive soils are typically very fine-grained and have a high to very high percentage of clay. Structures on expansive soils could incur damage incrementally over a long period of time, usually because of inadequate soil and foundation engineering or the placement of structures directly on expansive soils. Chemical corrosion by certain corrosive soils is a geologic hazard that affects buried metals and concrete in direct contact with soil or bedrock. Metal and concrete elements in contact with soil deemed to be corrosive, whether part of a foundation, the supported structure, or underground utilities, might be subject to degradation due to corrosion or chemical attack. Therefore, buried metal and concrete elements should be designed to resist corrosion and degradation based on accepted practices. The Geotechnical Report indicates the soils underlying the Project site consist of stiff to hard clay to sandy clay layers, and some of the near surface clay is potentially expansive. Further, the Geotechnical Report classified the soil as "corrosive" based on laboratory screening and corrosivity evaluation.

## *Paleontological Resources*

Paleontological resources are the fossilized remains or impressions of plants and animals, including vertebrates (animals with backbones; mammals, birds, fish, etc.), invertebrates (animals without backbones; starfish, clams, coral, etc.), and microscopic plants and animals (microfossils). They are valuable, non-renewable, scientific resources used to document the existence of extinct life forms and to reconstruct the environments in which they lived. Fossils can be used to determine the relative ages of the depositional layers in which they occur and of the geologic events that created those deposits. The age, abundance, and distribution of fossils depend on the geologic formation in which they occur and the topography of the area in which they are exposed. The geologic environments within which the plants or animals became fossilized usually were quite different from the present environments in which the geologic formations now exist.

As stated above, the surficial geologic units at the Project site are mapped as Holocene-age alluvial fan deposits and the entire site is shown to be located in a small fan of Holocene-age Younger alluvial fan deposits (Graymer, 2000, Kleinfelder, 2021). Due to the relatively young age of Holocene deposits, they generally have a low paleontological potential at the surface, but the potential increases with depth into the older portions of Holocene-age deposits and fossil resources may be encountered at the deeper levels. Due to the presence of potentially fossiliferous deposits underlying the Project site, demolition and construction activities associated with the Project may encounter and impact significant paleontological resources.

[10] Perched groundwater is a local saturated zone above the water table that typically exists above an impervious layer (such as clay) of limited extent.

## 4.7.6.2 Regulatory Setting

### *City of Oakland General Plan*

Chapter 3, *Geologic Hazards*, of the *Safety Element* of the City of Oakland General Plan describes the following policies regarding geological resources, adopted for the purpose of avoiding or mitigating an environmental effect, and that apply to the Project (City of Oakland, 2012).

> ***Policy GE-1*:** Develop and continue to enforce and carry out regulations and programs to reduce seismic hazards and hazards from seismically triggered phenomena.
>
> *Action GE-1.2*: Enact regulations requiring the preparation of site-specific geologic or geotechnical reports for development proposals in areas subject to earthquake-induced liquefaction, settlement or severe ground shaking, and conditioning project approval on the incorporation of necessary mitigation measures.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on geology and soils and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to geology and soils. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

> **SCA GEO-1: Construction-Related Permit(s).** *(Standard Condition of Approval 36)*
>
> **Requirement:** The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction.

> **SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).** *(Standard Condition of Approval 39)*
>
> **Requirement:** The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 177 (As amended), prepared by a registered geotechnical engineer for City review and approval containing at a minimum a description of the geological and geotechnical conditions at the site, an evaluation of site-specific seismic hazards based on geological and geotechnical conditions, and recommended measures to reduce potential impacts related to liquefaction and/or slope stability hazards. The project applicant shall implement the recommendations contained in the approved report during project design and construction.

### 4.7.6.3 Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- **Fault Rupture** (Criterion 1.a). There are no active faults that cross the Project site, and the nearest active fault to the Project site is the Hayward North section of the Hayward-Rodgers Creek Fault, located approximately 2.75 miles northeast of the Project site. Therefore, the potential for fault rupture to affect the Project is very low and not discussed further.
- **Landslides** (Criterion 1.d). The Project site is not within areas designated by the State Geologist where previous landslide movement has occurred. The Project site is also not mapped within areas designated as having the potential for seismically-induced landslides. Therefore, no impact is associated with this hazard.
- **Landfills** *(Criterion 5)* The Project site is not located above any landfill. Therefore, no impact is associated with this hazard.
- **Wastewater Disposal** (Criteria 6). The Project site is located within an urban area where all development would connect with the existing wastewater sewer infrastructure. Therefore, the Project would not require the use of septic or other alternative disposal wastewater systems. Therefore, no impact is associated with this hazard.

### 4.7.6.4 Project Impacts and Discussion

**Impact GEO-1: The Project would not expose people or structures to substantial risk of loss, injury, or death involving seismic hazards such as ground shaking and seismic-related ground failure such as liquefaction, differential settlement, collapse, or lateral spreading. (Criteria 1.b and 1.c) (*Less than Significant with SCAs*)**

The Project site is located in a seismically active region of California that contains a number of active faults. None of these faults cross the Project site and so there would be no impact related to surface fault rupture. However, the Project site is in proximity to active faults and is susceptible to strong seismic ground shaking, as well as the secondary seismic-related ground failures that are triggered by seismically induced ground shaking. The liquefaction analysis performed by the Geotech Report indicates potentially liquefiable soils are present beneath the Project site, and in the event of an earthquake those soils could lose their structural integrity and cause damage to foundations and structures. However, due to the depth and/or thickness of the potentially liquefiable layers, ground surface disruption is not expected to occur. Subsurface conditions and the distance to steeply inclined layers of rock at the Tidal Canal indicate the potential for lateral spreading and shaking-related dynamic compaction is low. Implementation of SCA GEO-1, Construction-Related Permits, and SCA GEO-2, Seismic Hazards Zone, would reduce the impacts of seismic hazards during construction. SCA GEO-1 would require the Project Applicant to obtain any and all applicable construction-related permits/approvals from the City, and would be required to comply with all standards, requirements, and conditions contained in construction related codes (e.g., the Oakland Building Code [which incorporates by reference the California Building Code] and the Oakland Grading Regulations), which would ensure structural integrity and safe construction. SCA GEO-2 requires preparation and submittal of a site-specific

geotechnical report that is to be consistent with the standards described in CGS Special Publication 177. The report would contain, at minimum, a description of the geologic and geotechnical conditions, and evaluation of site-specific seismic hazards, and recommended measures to reduce potential impacts. Implementation of the recommendations contained in the approved report during Project design and construction will be required and would reduce this impact to less than significant.

**SCA GEO-1: Construction-Related Permit(s).**

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).**

**Mitigation:** None required.

---

**Impact GEO-2: The Project would not result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways. (Criterion 2) (*Less than Significant with SCAs*)**

The Project would include ground-disturbing construction activities, including grading and excavation for building foundation and utilities, which could increase the risk of erosion or sediment transport. Construction would have the potential to result in soil erosion during excavation and grading.

The overall footprint of construction activities would exceed one acre. Therefore, the Project would be required to implement SCA HYD-1, State Construction General Permit, and comply with the Construction General Permit, which was developed to ensure that stormwater is managed and erosion is controlled on construction sites. The Construction General Permit requires Project Applicants to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which requires applications of Best Management Practice (BMPs) to control run-on and runoff from construction work sites. The BMPs could include, but would not be limited to, physical barriers to prevent erosion and sedimentation, construction of sedimentation basins, limitations on work periods during storm events, use of infiltration swales, protection of stockpiled materials, and a variety of other measures that would substantially reduce or prevent erosion from occurring during construction. Further, since the Project would require a grading permit, the Project Applicant would be required to comply with SCA HYD-4, Creek Protection Plan and submit a Creek Protection Plan while following the listed BMPs. This Plan is required to include necessary grading and/or construction operations measures to prevent any debris and dirt from flowing into the City's storm drain system and creeks (see Section 4.7.7, *Hydrology and Water Quality*). Compliance with these independently enforceable existing requirements would reduce the Project's potential impacts associated with soil erosion during construction to less than significant.

During operation, the Project would be required to comply with SCA HYD-2, NPDES C.3 Stormwater Requirements for Regulated Projects, relating to water quality and stormwater runoff during operation. The Project would also be subject to SCA UTIL-5, Storm Drain System, which requires, to the maximum extent practicable, a peak stormwater runoff reduction from the project

site by at least 25 percent compared to the pre-Project condition (see Section 4.7.14, *Utilities and Service Systems*). Therefore, the Project's potential impacts associated with soil erosion during operation would be less than significant.

**SCA HYD-1: State Construction General Permit.** See Section 4.7.7.

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 4.7.7.

**SCA UTIL-5: Storm Drain System.** See Section 4.7.14.

**Mitigation:** None required.

---

**Impact GEO-3: The Project would not be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code or corrosive soil, creating substantial risks to life or property. (Criterion 3) (*Less than Significant with SCAs*)**

The presence of expansive soils at the Project site could cause damage to the pavements and structures founded on shallow foundations, which could create a risk to life or property and result in a significant impact. SCA GEO-2 requires the Project Applicant to submit a site-specific geotechnical report, to be prepared by a registered geotechnical engineer, for City approval prior to construction. The geotechnical report is required to include an evaluation of site-specific seismic hazards, including expansive and corrosive soils at the Project site. As noted above, a Geotech Report was prepared for the Project by Kleinfelder in 2021. The Geotech Report classified the soils underlying the Project site as "corrosive." To address the potential risks associated with expansive and/or corrosive soils, the Geotech Report provides soil engineering recommendations and foundation design requirements to be implemented during construction that would reduce the risks associated with effects of expansive soils. Once approved, SCA GEO-2 also requires the Project Applicant to implement the recommendations contained in the report during Project design and construction.

Further, SCA GEO-1 requires the Project Applicant to obtain all necessary construction-related permits prior to construction. Adherence to all applicable standards and requirements of the Oakland Building Code and Oakland Grading Regulations, as required by SCA GEO-1, and implementation of the recommendations and design requirements provided in a City-approved geotechnical report required as part of SCA GEO-2, would reduce the impacts of expansive and corrosive soils to less than significant.

**SCA GEO-1: Construction-Related Permit(s).**

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).**

**Mitigation:** None required.

---

**Impact GEO-4: The Project would not be located above a well, pit, swamp, mound, tank vault, or unmarked sewer line, creating substantial risks to life or property. (Criterion 4) (*Less than Significant with SCAs*)**

As reported in a Phase II Environmental Site Assessment prepared for the Project site, underground fuel storage tanks (USTs) were installed in 1936 to provide fuel storage to operate furnaces and mobile equipment but were removed in 1986 (Apex, 2021). Fuel releases associated with these underground fuel storage tanks were investigated and remediated under the jurisdiction of the Alameda County Department of Environmental Health (ACDEH). After the facility was closed in 2015, a facility wide remediation (i.e., cleanup) program was initiated in which most of all hazardous materials were collected and removed from the site. Additionally, the Project Applicant would be required to submit a site-specific geotechnical report prior to construction (SCA GEO-2), which would include design requirements and recommendations, including proper handling of the subsurface materials beneath the Project site. See Impact HAZ-1 in Section 4.4, *Hazards and Hazardous Materials*, for a detailed description of proposed site cleanup plans and associated regulatory oversight including SCA HAZ-2. Adherence to SCA GEO-1 and SCA GEO-2, and SCA HAZ-2, would reduce these impacts to less than significant. Upon completion of the construction, there would be no operational impacts related to the Project site being located on a well, pit, swamp, mound, tank vault, or unmarked sewer line, resulting in a less-than-significant impact.

**SCA GEO-1: Construction-Related Permit(s).**

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).**

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Section 4.4.3.

**Mitigation:** None required.

---

**Impact GEO-5: The Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Criterion 7) (*Less than Significant with SCAs*)**

A review of geologic maps pertaining to the Project site indicates the Holocene-age geologic unit underlying the Project site has a low to high potential to contain paleontological resources with the potential to encounter fossils increasing with depth into the unit. Excavation, grading, and other below-ground construction (i.e., mat slab foundations) into previously undisturbed deposits have the potential to encounter and disturb paleontological resources; the greater and deeper the ground disturbance, the higher the potential to encounter and disturb significant resources. In the event that paleontological resources are encountered during construction activities, SCA CUL-1, Archeological and Paleontological Resources – Discovery During Construction, would require all work to stop within 50 feet of any discovery and for a qualified paleontologist to assess the find. If the find is deemed significant, appropriate measures would be taken to either avoid the resource or institute additional measures (i.e., salvage and excavation) to preserve any significant resource. The application of SCA CUL-1 would help to reduce any potential impact to significant

paleontological resources. Therefore, the Project's impact to paleontological resources would be less than significant.

> **SCA CUL-1: Archeological and Paleontological Resources – Discovery During Construction.** See Section 4.7.4.
>
> **Mitigation:** None required.

---

### 4.7.6.5 Cumulative Impacts

As analyzed above, the Project would not result in a significant impact related to fault rupture, landslides, landfills, or wastewater disposal. Because no impact would result, the Project could not cause or contribute to any cumulative effect in this regard. Therefore, this cumulative analysis focuses on whether the Project's less-than-significant impacts relating to seismic ground shaking and seismic-related ground failure, soil erosion and expansive soils, subsurface hazards, and paleontological resources would contribute to a cumulative effect.

**Impact GEO-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts to geology, soils, seismicity, or paleontology. (*Less than Significant with SCAs*)**

The Project would be constructed within the Central Estuary Plan Area's planning area and the Project would be constructed consistent with the goals set forth in the Plan.

Cumulative development projects near or adjacent to the Project site that could be constructed at the same time, could result in cumulative erosion effects. However, implementation of applicable erosion-related SCAs (i.e., SCAs HYD-1, HYD-2, HYD-3, and UTIL-6, discussed above) would reduce the Project's impact related to soil erosion. Cumulative development would also be subject to erosion-related SCAs and no cumulative impact would result. Specifically, the Construction General Permit has been developed to address cumulative conditions arising from construction throughout the state and is intended to maintain cumulative effects of projects subject to this requirement to less than significant levels. Through compliance with this requirement and City SCAs, the Project, combined with impacts of other projects in the area, would not combine to cause a significant cumulative impact related to erosion.

Seismically induced groundshaking, liquefaction, and expansive soils could cause structural damage or ruptures during construction and operation of cumulative projects. However, as discussed for the Project, state and local building regulations and SCA GEO-1 and SCA GEO-2 have been established to address and reduce the potential for such impacts to occur. The cumulative projects would be required to comply with the same applicable provisions of these laws and regulations. The purpose of the Oakland Building Code and local ordinances is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all buildings and structures within its jurisdiction; by design, it is intended to reduce the cumulative risks from buildings and structures. Based on compliance with these requirements, the incremental impacts of the Project, combined with impacts of other projects in

the area, would not combine to cause a significant cumulative impact related to seismically-induced groundshaking, liquefaction, or expansive soils.

Federal, state, and local laws can generally protect paleontological resources in most instances. Similar to the Project, any cumulative development would be required to comply with the same provisions of CEQA and implement measures similar to those identified above (SCA CUL-1). These measures would require protocols for responding in the event of any discovery of paleontological resources. Through compliance with applicable regulations and implementation of associated avoidance and minimization measures, the Project would not have a considerable contribution to adverse effects on paleontological resources of the region. This cumulative impact would be less than significant.

Potential exposure to geological and soils hazards, and impacts to paleontological resources, resulting from construction and operation of the Project would not have a cumulatively considerable contribution to a cumulative impact. No significant cumulative impact is identified.

**SCA GEO-1: Construction-Related Permit(s).**

**SCA GEO-2: Seismic Hazards Zone (Landslide/Liquefaction).**

**SCA HAZ-2: Hazardous Building Materials and Site Contamination.** See Section 4.4.3.

**SCA HYD-1: State Construction General Permit.** See Section 4.7.7.

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 4.7.7.

**SCA UTIL-5: Storm Drain System.** See Section 4.7.14.

**SCA CUL-1: Archeological and Paleontological Resources – Discovery During Construction.** See Section 4.7.4.

**Mitigation:** None required.

---

## 4.7.6.6 References

Apex companies, LLC, 2021. *Phase II Environmental Site Assessment Former Owens-Brockway Glass Facility 3600 Alameda Avenue Oakland, California*. October 27, 2021. Accessed April 26, 2022.

California Geological Survey (CGS). 2003. *Seismic Hazard Zone Report for the Oakland East 7.5-Minute Quadrangle, Alameda County, California*. Seismic Hazard Zone Report 080, 2003.

City of Oakland. 2012. *General Plan, Safety Element.* Adopted 2004; amended 2012.

Graymer, R.W. 2000. *Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California.* U.S. Geological Survey Miscellaneous Field Studies Map MF-2342. Scale 1:50,000. Accessed January 20, 2022. https://pubs.usgs.gov/mf/2000/2342/.

Kleinfelder. 2021. *Geotechnical Investigation Report, Industrial Warehouse Site; 3600 Alameda Avenue, Oakland, California.* Project No. 20214267.001A. May 26, 2021. Accessed January 20, 2022.

Petersen, Mark D., Frankel, Arthur D., Harmsen, Stephen C., Mueller, Charles S., Haller, Kathleen M., Wheeler, Russell L., Wesson, Robert L., Zeng, Yuehua, Boyd, Oliver S., Perkins, David M., Luco, Nicolas, Field, Edward H., Wills, Chris J., and Rukstales, Kenneth S (Peterson et al.). 2008. *Documentation for the 2008 Update of the United States National Seismic Hazard Maps,* U.S. Geological Survey Open-File Report 2008–1128. Accessed January 20, 2022. https://pubs.usgs.gov/of/2008/1128/ofr20081128v1.1.pdf.

United States Geological Survey (USGS). 2010. *Quaternary Fault and Fold Database for the United States*. Accessed January 20, 2022. https://www.usgs.gov/natural-hazards/earthquake-hazards/faults.

# 4.7.7 Hydrology and Water Quality

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **X. HYDROLOGY AND WATER QUALITY —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) Violate any water quality standards or waste discharge requirements; | ☐ | ☐ | ☒ | ☐ |
| 2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or proposed uses for which permits have been granted); | ☐ | ☐ | ☒ | ☐ |
| 3) Result in substantial erosion or siltation on- or off-site that would affect the quality of receiving waters; | ☐ | ☐ | ☒ | ☐ |
| 4) Result in substantial flooding on- or off-site; | ☐ | ☐ | ☒ | ☐ |
| 5) Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems; | ☐ | ☐ | ☒ | ☐ |
| 6) Create or contribute substantial runoff which would be an additional source of polluted runoff; | ☐ | ☐ | ☒ | ☐ |
| 7) Otherwise substantially degrade water quality; | ☐ | ☐ | ☒ | ☐ |
| 8) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, that would impede or redirect flood flows; | ☐ | ☐ | ☐ | ☒ |
| 9) Place within a 100-year flood hazard area structures which would impede or redirect flood flows; | ☐ | ☐ | ☐ | ☒ |
| 10) Expose people or structures to a substantial risk of loss, injury, or death involving flooding; | ☐ | ☐ | ☒ | ☐ |
| 11) Expose people or structures to a substantial risk of loss, injury, or death as a result of inundation by seiche, tsunami, or mudflow; | ☐ | ☐ | ☒ | ☐ |
| 12) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course, or increasing the rate or amount of flow, of a creek, river, or stream in a manner that would result in substantial erosion, siltation, or flooding, both on- or offsite; or | ☐ | ☐ | ☒ | ☐ |
| 13) Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources.[11] | ☐ | ☐ | ☒ | ☐ |

[11] **Note**: Although there are no specific, numeric/quantitative criteria to assess impacts, factors to be considered in determining significance include whether there is substantial degradation of water quality through (a) discharging a substantial amount of pollutants into a creek, (b) significantly modifying the natural flow of the water or capacity, (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability, or (d) substantially endangering public or private property or threatening public health or safety.

## 4.7.7.1 Environmental Setting

### *Surface Water, Runoff, and Water Quality*

The Project site is in a relatively flat and highly urbanized area. The closest bodies of water to the Project site are the artificial Tidal Canal that runs between the City and Alameda, approximately 100 feet southwest of the Project site, the San Leandro Bay, located approximately 0.66 miles south of the Project site, and Brooklyn Basin, located approximately 0.85 miles northwest of the Project site (Oakland Museum of California, 2000)

Stormwater runoff in Oakland is generally collected from the Oakland-Berkeley Hills to the northeast through the developed flatlands where it then flows primarily through underground storm drains and culverts to the San Francisco Bay via the Oakland Estuary (directly or by way of Lake Merritt) or through the City of Emeryville. The Alameda County Flood Control and Water Conservation District (ACFCWCD) constructs, operates, and maintains major trunk lines and flood-control facilities in Oakland, and the Oakland Public Works Agency is responsible for construction and maintenance of the local storm drainage system within Oakland's public areas and roads.

In the Bay Area, including the Project area, the San Francisco Bay Regional Water Quality Control Board (RWQCB) is responsible for implementing the Water Quality Control Plan (Basin Plan). The Basin Plan establishes beneficial water uses for waterways and water bodies within the region and is a master policy document for managing water quality in the region (RWQCB, 2019).

### *Groundwater*

The Department of Water Resources (DWR) considers the East Bay Plain (DWR Groundwater Basin No. 2-009.04) an important and beneficial groundwater basin underlying the East Bay, extending from Richmond to Hayward. The alluvial materials that extend westward from the East Bay hills to the edge of the San Francisco Bay constitute the deep water-bearing strata for East Bay Plain groundwater basin (DWR, 2004). This deep basin provides municipal, industrial, and agricultural water supply. However, water supply for the Project area is not provided by groundwater sources in this basin, but rather from surface water sources maintained by East Bay Municipal Utility District (EBMUD).

### *Flooding Hazards*

The City of Oakland 2021-2026 Local Hazard Mitigation Plan was developed to reduce risks from disasters to the people, property, economy, and environment within the City (City of Oakland, 2021). The plan complies with federal and state hazard mitigation planning requirements to establish eligibility for funding under Federal Emergency Management Agency (FEMA) grant programs and includes sections related to flooding, tsunamis and seiches, dam failure, and sea-level rise. This section considers these topics.

### Flood Zones

Flooding is any overflowing of water onto land that is normally dry, whether due to rain, ocean waves, snowmelt, or the failure of a dam or levee. The extent of flooding associated with a one percent annual probability of occurrence (the base flood or 100-year flood) is used as a regulatory boundary by many agencies.[12] This is referred to as the special flood hazard area (SFHA) and is a convenient tool for assessing vulnerability and risk in flood-prone communities (City of Oakland, 2021).

FEMA defines flood hazard areas as areas expected to be inundated by a flood of a given magnitude and uses its Digital Flood Insurance Rate Maps (DFIRMs) to designate various SFHAs and other areas. The Project site is not located in a designated 100-year flood zone. However, a small portion of the site, along Fruitvale Avenue, is located within a 500-year flood zone (MTC and ABAG, 2021). According to DFIRM, this portion of the site is mapped within a zone where the land elevation has been determined to be above the base flood elevation, but below the 500-year flood elevation and these zones are not considered to be SFHAs (City of Oakland, 2021).

### Tsunami and Seiche

Tsunamis are a series of waves caused by an underwater earthquake, landslide, or volcanic eruption. The City of Oakland General Plan Safety Element describes the tsunami hazard in Oakland as an uncommon occurrence on the California coast. The National Weather Service is responsible for issuing warnings about potential tsunamis along the West Coast of the United States. Warning times vary depending on the distance to the earthquake epicenter. Most often, tsunamis are generated by large offshore earthquakes in the Pacific Ocean, producing waves that reach the California coast many hours after the earthquake. Tsunamis can also be generated by local earthquakes, in which case the first waves could reach shore mere minutes after the ground stops shaking, giving authorities no time to issue a warning. For most tsunamis approaching the coast, several hours are available to evacuate residents and undertake other emergency preparations. Flooding from tsunamis would affect low-lying areas along San Francisco Bay and the Oakland Estuary, especially filled areas that are only a few feet above sea level. Although the probability of a tsunami affecting Oakland is low, given the rarity and unpredictability of the hazard, the impact from a rare tsunami would be high. The Project site is located within a tsunami evacuation zone (MTC and ABAC, 2021).

Seiches are water level oscillations in an enclosed or semi-enclosed body of water such as a lake, reservoir, or harbor. The City of Oakland General Plan Safety Element describes the occurrence of devastating seiches in Oakland as highly unlikely. In Oakland, the only threat of large-scale damage from seiches appears to come from downstream flooding that would be caused by large volumes of water overtopping a dam or reservoir. Seiche risk at areas along Oakland's shoreline, including the Project site, is considered to be very low risk (City of Oakland, 2021).

[12] A 10-year flood event has a 1 percent probability of being exceeded in any given year. Because this event's probability resets each year, it is possible, although unlikely, for more than one 100-year flood to occur within any given period 100 years long. A 500-year flood event has a 0.2 percent probability of being exceeded in any given year.

### Sea Level Rise

Sea-level rise is primarily caused by global warming. In the last century, San Francisco Bay water levels have risen nearly 8 inches (NOAA, 2018). Given current trends in greenhouse gas emissions and increasing global temperatures, sea level rise is expected to accelerate in the coming decades, with scientists projecting as much as a 66-inch increase in sea level along segments of California's coast by the year 2100 (CCC, 2021). As bay water levels continue to rise, the extent and frequency of flooding will increase. Areas once considered to be outside of the floodplain will begin to experience periodic coastal and/or urban flooding (City of Oakland 2021).

The State of California has provided and continues to update planning guidance for assessing and adapting to the impacts of sea level rise. The City's 2021-2026 Local Hazard Management Plan (City of Oakland, 2021), and the Preliminary Sea Level Rise Road Map (City of Oakland, 2017), both consider impacts from sea-level rise based on this State guidance. Sea levels offshore of Oakland are expected to rise between 11 and 24 inches by mid-century and 36 to 66 inches by 2100 (City of Oakland, 2017). According to the Preliminary Sea Level Rise Road Map, the Project site is above the area that would be permanently inundated with 72 inches of sea level rise, or the area that would be temporarily flooded due to a 100-year storm with 30 inches of sea level rise.

### Dam Inundation

Dam failure can cause massive destruction to the ecosystems and communities located downstream. The most common causes are earthquakes, landslides, extreme storms, equipment malfunction, structural damage, foundation failures, and sabotage (City of Oakland, 2021). An inundation map shows flooding that could result from a hypothetical failure of a dam or its critical structure (DWR, 2022). The Project site itself is not located in a dam inundation area, however the inundation area of the Central Reservoir surrounds the Project site and runs along the adjacent streets (DWR, 2021).

## 4.7.7.2 Regulatory Setting

### *National Pollutant Discharge Elimination System (NPDES) Permit*

The NPDES permit system was established in the federal Clean Water Act to regulate municipal and industrial point discharges to surface waters of the U.S. Each NPDES permit for point discharges contains limits on allowable concentrations of pollutants contained in discharges. The City of Oakland is covered by Municipal Regional Stormwater NPDES Permit No. CAS612008 and Order No. R2-2015-0049 (MRP). In accordance with the MRP requirements, new development and redevelopment projects are required to incorporate treatment measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and manage runoff flows.

Among many other stormwater management requirements included in the MRP, Provision C.3 contains specific post-construction runoff requirements for new development and redevelopment. Provision C.3 governs storm drain systems and regulates post-construction stormwater runoff. The provision requires new development and redevelopment projects to incorporate treatment

measures and other appropriate source control and site design features to reduce the pollutant load in stormwater discharges and to manage runoff flows.

### *Porter-Cologne Water Quality Control Act*

Porter-Cologne, passed in 1969, articulates with the federal Clean Water Act. It established the State Water Board and divided the state into nine regions, each overseen by a regional Water Board. In general, the State Water Board manages both water rights and statewide regulation of water quality, while the regional Water Boards focus exclusively on water quality in their regions.

Coverage under a Construction Stormwater General Permit (Construction General Permit) requires the preparation and implementation of a stormwater pollution prevention plan (SWPPP) and notice of intent (NOI). The SWPPP includes pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills), demonstration of compliance with all applicable local and regional erosion and sediment control standards, identification of responsible parties, a detailed construction timeline, and a BMP monitoring and maintenance schedule. The NOI includes site-specific information and the certification of compliance with the terms of the Construction General Permit.

### *California State Lands Commission and AB 691*

The California State Lands Commission has jurisdiction over tidelands and submerged lands along the entire coast, and within three nautical miles offshore from the ordinary high water mark. The California State Lands Commission requires sea level rise planning by Legislative Trust Grantees, such as the Port of Oakland; and requires grantees with average annual gross public trust revenues over $250,000 to prepare and submit a sea level rise plan to the California State Lands Commission no later than July 1, 2019. The Port of Oakland submitted a Sea Level Rise Assessment on July 1, 2019.

### *San Francisco Bay Plan*

The San Francisco Bay Conservation and Development Commission (BCDC) has regulatory jurisdiction over the Bay shoreline, which is generally the first 100 feet inland from the shoreline of the San Francisco Bay and Oakland Estuary. BCDC's San Francisco Bay Plan (Bay Plan) implements the 1965 McAteer-Petris Act (Government Code Sections 66600–66694), which charges BCDC with planning for the long-term use of the Bay and regulating development in and around the Bay. The Bay Plan provides policy direction for BCDC's permit authority regarding the placement of fill, extraction of materials, determining substantial changes in use of land, water, or structures within its jurisdiction, protection of the Bay habitat and shoreline, and maximizing public access to the Bay.

Sea level rise vulnerability and risk assessments are required when planning shoreline areas. New projects likely to be affected by future sea level rise and storm surge activity during the life of the project must meet additional requirements and, when feasible, integrate hard shoreline protection structures with natural features that enhance the Bay ecosystem (e.g., including marsh and/or

upland vegetation). BCDC reviews permits for proposed projects in the shoreline band for consistency with the McAteer-Petris Act and the Bay Plan.

### *City of Oakland General Plan*

The *Open Space, Conservation, and Recreation Element* of the Oakland General Plan describes the following policies regarding water resources, adopted for the purpose of protecting water resources, and that apply to the Project (City of Oakland, 1996).

> ***Policy CO-5.1:*** Encourage groundwater recharge by protecting large open space areas, maintaining setbacks along creeks and other recharge features, limiting impervious surfaces where appropriate, and retaining natural drainage patterns within newly developing areas.
>
> ***Policy CO-5.2:*** Support efforts to improve groundwater quality, including the use of non-toxic herbicides and fertilizers, the enforcement of anti-litter laws, the clean-up of sites contaminated by the Alameda County Flood Control and Water Conservation District.
>
> ***Policy CO-5.3:*** Employ a broad range of strategies, compatible with Alameda Countywide Clean Water Program, to: (a) reduce water pollution associated with stormwater runoff; (b) reduce water pollution associated with hazardous spills, runoff from hazardous material areas, improper disposal of household hazardous wastes, illicit dumping, and marina "live-aboards"; and (c) improve water quality in Lake Merritt to enhance the lake's aesthetic, recreational, and ecological functions.

The *Safety Element* (Adopted 2004, Amended 2012) of the Oakland General Plan (City of Oakland, 2012) describes the following policies regarding flooding hazards that apply to the Project.

> ***Policy FL-1:*** Enforce and update local ordinances, and comply with regional orders, that would reduce the risk of storm-induced flooding.
>
> > *Action FL-1.2:* Continue to require that subdivisions be designed to minimize flood damage by, among other things, having lots and rights-of-way be laid out for the provision of approved sewer and drainage facilities, providing on-site detention facilities whenever practicable and having utility facilities be constructed in ways that reduce or eliminate flood damage.

### *Oakland Municipal Code Chapter 13.16*

The City's Creek Protection, Stormwater Management, and Discharge Control Ordinance (Chapter 13.16 of the Oakland Municipal Code) prohibits activities that would result in the discharge of pollutants to Oakland's waterways or in damage to creeks, creek functions, or habitat. The ordinance requires the use of standard BMPs to prevent pollution or erosion to creeks and/or storm drains. Additionally, a creek protection permit is required for any construction work on creekside properties. The ordinance establishes comprehensive guidelines for the regulation of discharges to the City's storm drain system and the protection of surface water quality. Under the ordinance, the City of Oakland Public Works Agency issues permits for storm drainage facilities that would be connected to existing City drainage facilities. The ordinance includes enforcement provisions to provide more effective methods to deter and reduce the discharge of pollutants to the storm drain system, local creeks, and San Francisco Bay. As described above, the Project site is bordered by the artificial Tidal Canal, which is a part of the Oakland the Estuary. The Estuary

is considered a waterway under the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) and a creek protection permit would be required for the Project.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on hydrology and water quality and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to hydrology and water quality. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA HYD-1: State Construction General Permit** *(Standard Condition of Approval 50)*

**Requirement:** The project applicant shall comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (SWRCB). The project applicant shall submit a Notice of Intent (NOI), Stormwater Pollution Prevention Plan (SWPPP), and other required Permit Registration Documents to SWRCB. The project applicant shall submit evidence of compliance with Permit requirements to the City.

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects** *(Standard Condition of Approval 54)*

***a. Post-Construction Stormwater Management Plan Required***

**Requirement:** The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following:

i. Location and size of new and replaced impervious surface;

ii. Directional surface flow of stormwater runoff;

iii. Location of proposed on-site storm drain lines;

iv. Site design measures to reduce the amount of impervious surface area;

v. Source control measures to limit stormwater pollution;

vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and

vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff.

***b. Maintenance Agreement Required***

**Requirement:** The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures

Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following:

i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and

ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary.

The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense.

**SCA HYD-3: Vegetation Management on Creekside Properties.** *(Standard Condition of Approval 57)*

**Requirement:** The project applicant shall comply with the following requirements when managing vegetation prior to, during, and after construction of the project:

a. Identify and leave "islands" of vegetation in order to prevent erosion and landslides and protect habitat;

b. Trim tree branches from the ground up (limbing up) and leave tree canopy intact;

c. Leave stumps and roots from cut down trees to prevent erosion;

d. Plant fire-appropriate, drought-tolerant, preferably native vegetation;

e. Provide erosion and sediment control protection if cutting vegetation on a steep slope;

f. Fence off sensitive plant habitats and creek areas if implementing goat grazing for vegetation management;

g. Obtain a Tree Permit before removing a Protected Tree (any tree 9 inches diameter at breast height or dbh or greater and any oak tree 4 inches dbh or greater, except eucalyptus and Monterey pine);

h. Do not clear-cut vegetation. This can lead to erosion and severe water quality problems and destroy important habitat;

i. Do not remove vegetation within 20 feet of the top of the creek bank. If the top of bank cannot be identified, do not cut within 50 feet of the centerline of the creek or as wide a buffer as possible between the creek centerline and the development;

j. Do not trim/prune branches that are larger than 4 inches in diameter;

k. Do not remove tree canopy;

l. Do not dump cut vegetation in the creek;

m. Do not cut tall shrubbery to less than 3 feet high; and

n. Do not cut short vegetation (e.g., grasses, ground-cover) to less than 6 inches high.

**When Required:** Ongoing

**Initial Approval:** N/A

**Monitoring/Inspection:** Bureau of Building

**SCA HYD-4: Creek Protection Plan.** *(Standard Condition of Approval 58)*

***a. Creek Protection Plan Required***

**Requirement:** The project applicant shall submit a Creek Protection Plan for review and approval by the City. The Plan shall be included with the set of project drawings submitted to the City for site improvements and shall incorporate the contents required under section 13.16.150 of the Oakland Municipal Code including Best Management Practices ("BMPs") during construction and after construction to protect the creek. Required BMPs are identified below in sections (b), (c), and (d).

**When Required:** Prior to approval of construction-related permit

**Initial Approval:** Bureau of Planning

**Monitoring/Inspection:** N/A

***b. Construction BMPs***

**Requirement:** The Creek Protection Plan shall incorporate all applicable erosion, sedimentation, debris, and pollution control BMPs to protect the creek during construction. The measures shall include, but are not limited to, the following:

i. On sloped properties, the downhill end of the construction area must be protected with silt fencing (such as sandbags, filter fabric, silt curtains, etc.) and hay bales oriented parallel to the contours of the slope (at a constant elevation) to prevent erosion into the creek.

ii. The project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent biodegradable erosion control fabric shall be installed on all graded slopes to protect and stabilize the slopes during construction and before permanent vegetation gets established. All graded areas shall be temporarily protected from erosion by seeding with fast growing annual species. All bare slopes must be covered with staked tarps when rain is occurring or is expected.

iii. Minimize the removal of natural vegetation or ground cover from the site in order to minimize the potential for erosion and sedimentation problems. Maximize the replanting of the area with native vegetation as soon as possible.

iv. All work in or near creek channels must be performed with hand tools and by a minimum number of people. Immediately upon completion of this work, soil must be repacked and native vegetation planted.

v. Install filter materials (such as sandbags, filter fabric, etc.) acceptable to the City at the storm drain inlets nearest to the project site prior to the start of the wet weather season (October 15); site dewatering activities; street washing activities; saw cutting asphalt or concrete; and in order to retain any debris flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding.

vi. Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.

vii. Direct and locate tool and equipment cleaning so that wash water does not discharge into the creek.

viii. Create a contained and covered area on the site for storage of bags of cement, paints, flammables, oils, fertilizers, pesticides, or any other materials used on the project site that have the potential for being discharged to the creek or storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site.

ix. Gather all construction debris on a regular basis and place it in a dumpster or other container which is emptied or removed at least on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution.

x. Remove all dirt, gravel, refuse, and green waste from the sidewalk, street pavement, and storm drain system adjoining the project site. During wet weather, avoid driving vehicles off paved areas and other outdoor work.

xi. Broom sweep the street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall be scraped from these areas before sweeping. At the end of each workday, the entire site must be cleaned and secured against potential erosion, dumping, or discharge to the creek, street, gutter, or storm drains.

xii. All erosion and sedimentation control measures implemented during construction activities, as well as construction site and materials management shall be in strict accordance with the control standards listed in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Control Board (RWQCB).

xiii. Temporary fencing is required for sites without existing fencing between the creek and the construction site and shall be placed along the side adjacent to construction (or both sides of the creek if applicable) at the maximum practical distance from the creek centerline. This area shall not be disturbed during construction without prior approval of the City.

**When Required:** Prior to approval of construction-related permit

**Initial Approval:** Bureau of Planning

**Monitoring/Inspection:** N/A

***c. Post-Construction BMPs***

**Requirement:** The project shall not result in a substantial increase in stormwater runoff volume or velocity to the creek or storm drains. The Creek Protection Plan shall include site design measures to reduce the amount of impervious surface to maximum extent practicable. New drain outfalls shall include energy dissipation to slow the velocity of the water at the point of outflow to maximize infiltration and minimize erosion.

**When Required:** Prior to approval of construction-related permit

**Initial Approval:** Bureau of Planning

**Monitoring/Inspection:** N/A

*d. Creek Landscaping*

**Requirement:** The project applicant shall include final landscaping details for the site on the Creek Protection Plan, or on a Landscape Plan, for review and approval by the City. Landscaping information shall include a planting schedule, detailing plant types and locations, and a system to ensure adequate irrigation of plantings for at least one growing season. Plant and maintain only drought-tolerant plants on the site where appropriate as well as native and riparian plants in and adjacent to riparian corridors. Along the riparian corridor, native plants shall not be disturbed to the maximum extent feasible. Any areas disturbed along the riparian corridor shall be replanted with mature native riparian vegetation and be maintained to ensure survival.

**When Required:** Prior to approval of construction-related permit

**Initial Approval:** Bureau of Planning

**Monitoring/Inspection:** N/A

*e. Creek Protection Plan Implementation*

**Requirement:** The project applicant shall implement the approved Creek Protection Plan during and after construction. During construction, all erosion, sedimentation, debris, and pollution control measures shall be monitored regularly by the project applicant. The City may require that a qualified consultant (paid for by the project applicant) inspect the control measures and submit a written report of the adequacy of the control measures to the City. If measures are deemed inadequate, the project applicant shall develop and implement additional and more effective measures immediately.

**When Required:** During construction; ongoing

**Initial Approval:** N/A

**Monitoring/Inspection:** Bureau of Building

**SCA HYD-5: Bay Conservation and Development Commission (BCDC) Approval**
*(Standard Condition of Approval 61)*

**Requirement:** The project applicant shall obtain the necessary permit/approval, if required, from the Bay Conservation and Development Commission (BCDC) for work within BCDC's jurisdiction to address issues such as but not limited to shoreline public access and sea level rise. The project applicant shall submit evidence of the permit/approval to the City and comply with all requirements and conditions of the permit/approval.

### 4.7.7.3 Topics Considered and No Impact Determined

The Project would have no impact to the following topics based on the Project characteristics, its geographical location, and underlying site conditions. Therefore, these topics are not addressed further in this document for the following reasons:

- ***Flood Hazards*** (Criteria 8, 9, and 10). The Project site is not located in a designated 100-year or other flood zone, a floodplain, or a floodway and would not impede or otherwise redirect any flood flows to other areas (MTC and ABAG, 2021). Additionally, no housing is proposed

as part of the Project. Therefore, the Project would not place housing or structures within a 100-year flood hazard area which would impede or redirect flood flows. Given the above, the risk of flooding on the Project site is very low, and the Project would not expose people or structures to a substantial risk of loss, injury, or death involving flooding. Thus, no impact would occur.

### 4.7.7.4 Project Impacts and Discussion

**Impact HYD-1: The Project would not violate water quality standards; substantially alter the existing drainage pattern of the site that would result in erosion, siltation, or flooding on- or offsite that could affect receiving water quality; otherwise substantially degrade water quality; or fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16). (Criteria 1, 3, 7, 12, and 13) (*Less than Significant with SCAs*)**

The total area of land disturbed by the Project including sidewalk and street improvements would be more than one acre. Therefore, the Project would be required to implement SCA HYD-1, State Construction General Permit, which was developed to ensure that stormwater is managed and erosion is controlled on construction sites. The Construction General Permit requires Project Applicants to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which requires applications of Best Management Practice (BMPs) to control run-on and runoff from construction work sites.

Overall, the Project would result in a reduction of impervious area on the Project site from approximately 1,153,905 square feet to 912,075 square feet. The Project would result in 241,830 square feet of post-Project pervious area. Since the Project would create or replace 10,000 square feet or more of new or existing impervious surface area, SCA HYD-2, NPDES C.3 Stormwater Requirements for Regulated Projects, relating to water quality and stormwater runoff during operation, would apply to the entire site. This SCA requires a post-construction stormwater management plan and maintenance agreement. In addition, the Project would be subject to SCA UTIL-5, Storm Drain System, which requires, to the maximum extent practicable, a peak stormwater runoff reduction from the Project site by at least 25 percent compared to the pre-Project condition (see Section 4.7.14, *Utilities and Service Systems*). Stormwater from the Project site would be collected and treated on-site and routed to an existing storm drain line in Alameda Avenue. Stormwater management-related site design measures would include directing roof runoff into vegetated areas; directing runoff from sidewalks, walkways, and/or patios onto vegetated areas; and directing runoff from driveways and/or uncovered parking lots onto vegetated areas. The Project would implement source control measures to minimize sources of runoff pollution including measures to minimize run-on to and run-off from the loading area.

As described above, the Project site is bordered by the artificial Tidal Canal, which is a part of the Oakland Estuary. As described in Chapter 3, *Project Description*, the Project would include a realignment of Alameda Avenue, including new pedestrian sidewalks and bike facilities, and increased public access to the estuary shoreline and the Bay Trail. This construction work would occur as close as one foot from the top of the bank. The Estuary is considered a waterway under the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16). Therefore, the Project would require a Category IV Creek Protection Permit which is required when exterior work is

conducted from the centerline of the Creek to within 20 feet from the top of the creek bank. Pursuant to Section 13.16.130.E of the Oakland Municipal Code, the Category IV Creek Protection Permit could be reclassified given the limited scope of work that would not affect the creek in a manner that would lead to erosion, bank failure, increased runoff, sediment loading, transfer or pollutants, or damage to the natural habitat, riparian vegetation or wildlife. The City's ordinance is intended to address potential water quality impacts from stormwater and other discharges into identified waterways. The Category 4 Creek Protection Permit would require a site plan to be submitted with the permit application, clearly illustrating the relationship and distance of the Project to the creek centerline and top of the creek bank. In addition, Category 4 permits are required to submit a Creek Protection Plan (CPP) that describes how you will protect the creek, its banks, riparian vegetation wildlife, surrounding habitat, and the creek's natural appearance during and after construction. Therefore, the Project Applicant would be required to prepare a CPP in accordance with SCA HYD-4, Creek Protection Plan. SCA HYD-4 requires the CPP to incorporate all applicable erosion, sedimentation, debris, and pollution control BMPs during construction and site design measures to limit stormwater runoff volume and velocity. The Project would also be subject to SCA HYD-3, Vegetation Management of Creekside Properties, requiring vegetation management prior to, during, and after the construction further protecting against sedimentation and erosion.

The Project would include a realignment of Alameda Avenue, including new pedestrian sidewalks and bike facilities, and increased public access to the estuary shoreline and the Bay Trail. This construction work would occur within the BCDC jurisdiction, which is generally the first 100 feet inland from the shoreline of the Oakland Estuary. Therefore, the Project Applicant would be required to obtain a permit/approval from BCDC in accordance with SCA HYD-5, Bay Conservation and Development Commission (BCDC) Approval.

With implementation of these SCAs, the Project would not violate water quality standards, result in erosion, siltation, or flooding on- or offsite that could affect receiving water quality, or otherwise substantially degrade water quality. The Project would control stormwater on-site, would not include any non-stormwater discharges to the Tidal Canal or storm drain system, and would not fundamentally conflict with the City of Oakland Creek Protection Ordinance. Impacts would be less than significant.

**SCA HYD-1: State Construction General Permit.**

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.**

**SCA HYD-3: Vegetation Management on Creekside Properties.**

**SCA HYD-4: Creek Protection Plan.**

**SCA HYD-5: Bay Conservation and Development Commission (BCDC) Approval**.

**SCA UTIL-5: Storm Drain System.** See Section 4.7.14.

**Mitigation:** None required.

**Impact HYD-2: The Project would not result in substantially depleted groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or lowering the local groundwater table. (Criterion 2) (*Less than Significant*)**

Based on sampling at the Project site, groundwater has been encountered between 8 to 15 feet below ground surface (bgs). Kleinfelder found the depth to groundwater is approximately 8 to 10 feet below the current ground surface level based on measurements during the exploration program (Kleinfelder, 2021). Meanwhile, Apex encountered groundwater from 13 to 15 bgs (Apex, 2021). Based on the shallow foundation design recommendations from the Geotech Report (see Section 4.7.6, *Geology and Soils*), dewatering of the Project site is not expected to be required during construction. However, if groundwater were to be encountered and dewatering necessary, water would be extracted in a limited quantity and would not substantially deplete groundwater. As noted above, the Project would not result in an increase in impervious surfaces, would direct runoff towards vegetation where possible, and thus would not result in an adverse impact with respect to groundwater recharge. The Project would not result in substantially depleted groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or lowering the local groundwater table and impacts would be less than significant.

**Mitigation:** None required.

---

**Impact HYD-3: The Project would not result in substantial flooding on- or off-site, create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems, or create or contribute substantial runoff which would be an additional source of polluted runoff. (Criteria 4, 5, and 6) (*Less than Significant with SCAs*)**

Construction of the Project would include earthmoving activities such as excavation and grading. As described above, the Project would be required to implement a SWPPP per SCA HYD-1, State Construction General Permit. The SWPPP would describe BMPs for controlling site run-on and runoff from construction work sites. BMPs contained in the SWPPP would control the volume and velocity of runoff, thereby reducing the risk of substantial on- or off-site flooding during construction. As discussed above, the Project site is currently covered with impervious surfaces. The Project would result in a reduction of impervious area on the Project site and result in 241,830 square feet of post-Project pervious area. The Project would direct roof, sidewalks, walkways, patios, driveways, and/or uncovered parking lots onto vegetated areas. Furthermore, the Project would cover and enclose trash/recycling storage areas and design these areas to prevent stormwater runoff. The Project would be designed to meet the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the NPDES and implement a Post-Construction Stormwater Management Plan to reduce pollutant load from the site into the stormwater drainage system and receiving waters, as required through SCA HYD-2, NPDES C.3 Stormwater Requirements for Regulated Projects. The Project would also be required to comply with SCA HYD-4, Creek Protection Plan, which outlines construction BMPs. The Project would also be subject to SCA UTIL-5, Storm Drain System, which requires, to the maximum extent

practicable, a peak stormwater runoff reduction from the Project site by at least 25 percent compared to the pre-Project condition (see Section 4.7.14, *Utilities and Service Systems*).

Implementation of these SCAs would also ensure that the Project would not contribute substantial runoff which would exceed the capacity of the City's stormwater drainage system. Rather, the Project would provide a reduction of stormwater runoff velocities, volume, and pollutant load compared with pre-Project conditions. Overall, the Project would reduce the risk of substantial flooding on- or off-site and polluted runoff, and the impact would be less than significant.

**SCA HYD-1: State Construction General Permit.**

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.**

**SCA HYD-4: Creek Protection Plan.**

**SCA UTIL-5: Storm Drain System.** See Section 4.7.14.

**Mitigation:** None required.

---

**Impact HYD-4: The Project would not expose people or structures to a substantial risk of loss, injury, or death involving flooding. (Criteria 10, and 11) (*Less than Significant*)**

An inundation map shows the approximate flooding that could result from a hypothetical failure of a dam or its critical structure and is intended to provide general information for emergency planning and response (DWR, 2022). The Project site edges are within the dam inundation area of the Central Reservoir Dam, which is categorized as an extremely high hazard dam (DWR, 2021; EBMUD, 2022). Failure of the Central Dam could cause massive destruction to the ecosystems and communities located downstream. The most common causes are earthquakes, landslides, extreme storms, equipment malfunction, structural damage, foundation failures, and sabotage (City of Oakland, 2021). The edges of the Project site are estimated to flood between one and four feet between 1.5 and 2 hours after a dam failure. Although the western edge of the Project building would be separated from Fruitvale Avenue and the Project site boundary by a narrow landscaped strip, most of the Project building would be in the Project site interior which is not estimated to flood in the event of a dam failure. In addition, the Project building finished floor elevation would be at least a foot above ground surface. Overall, the Project would not expose people or structures to a substantial risk of loss, injury, or death because of inundation and the impact would be less than significant.

The Project site is located in a tsunami evacuation zone. The National Weather Service is responsible for issuing warnings about potential tsunamis along the West Coast of the United States. A warning is issued when damaging tsunami waves inundating dry land are expected. Warning times for tsunamis vary depending on the distance to the epicenter of the earthquake that caused them (City of Oakland, 2021). For most tsunamis approaching the coast, several hours are available to evacuate residents and undertake other emergency preparations. Flooding from tsunamis would affect low-lying areas along San Francisco Bay and the Oakland Estuary,

especially areas that are only a few feet above sea level (City of Oakland, 2004). Tsunamis are addressed in the Safety Element of the Oakland General Plan which indicates that areas along Oakland's Inner Harbor, Brooklyn Basin and the Tidal Canal would be sheltered by the island of Alameda. The likelihood of large-scale devastation in Oakland resulting from tsunamis appears to be small, especially as there would usually be ample time to evacuate residents at risk (City of Oakland, 2004). The Oakland Office of Emergency Services (OES) has identified a network of evacuation routes in the General Plan Safety Element (City of Oakland, City of Oakland General Plan Safety Element, 2012). Emergency Evacuation Routes are typically along major thoroughfares. Nearby Emergency Evacuation Routes include the north-south Fruitvale Avenue along the west side of the Project site and east-west San Leandro Street about three blocks north of the Project site. Therefore, the Project would not expose people or structures to the risk of loss, injury, or death because of flooding.

**Mitigation:** None required.

---

## 4.7.7.5 Cumulative Impacts

**Impact HYD-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts on surface water or groundwater quality. (*Less than Significant with SCAs*)**

As analyzed above, the Project is not located in a 100-year floodplain and therefore would not result in a significant impact relating to this. Therefore, this cumulative analysis focuses on these aspects of the Project as well as the Project's less-than-significant impacts relating to water quality, groundwater, and flooding (including tsunamis and dam failures) and runoff during construction and operation.

The geographic scope for cumulative impacts on water quality is the area managed by the RWQCB's Basin Plan that receives runoff from tributaries and discharges from industrial and urban sources into the Bay. The cumulative development for water quality includes all development within the Basin Plan. The cumulative context for groundwater is the East Bay Basin Plan boundary. The cumulative context for the Project's stormwater runoff would be the development within the City's stormwater drainage collection area that includes the Project site.

### Cumulative Impact and Project Contribution

#### Water Quality

The Project, in combination with other past, present, and future development in the Basin Plan watersheds would continue to contribute runoff and discharges to the Bay that contain constituents from agriculture, industrial, and urban land uses that would continue to potentially impact water quality in the Basin Plan area resulting in the need for continual updates to water quality control plans like the Basin Plan, and water quality regulations like those listed in the regulatory setting in this section. Likewise, these activities would continue to infiltrate and affect groundwater quality in the East Bay Basin. However, the Project would be required to comply with the current and future Basin Plan, applicable NPDES Permit requirements and ordinances,

Creek Protection Permit requirements, and other water quality and stormwater control regulations, including SCA HYD-1, HYD-2, HYD-3, HYD-4, and UTIL-6. These regulatory requirements and the design of the Project to capture on-site stormwater within a new on-site stormwater system meeting stormwater quality design specifications would reduce the Project's incremental contribution to a cumulative impact to water quality to a less-than-considerable level. They also contain construction BMPs to protect the creek during construction. Therefore, the Project would not have a cumulatively considerable contribution to the cumulative impact on water quality, and the impact would be less than significant.

### Groundwater

The Project would not involve groundwater extraction or dewatering, and the total post-Project impervious surface would be reduced relative to the existing/pre-Project impervious surface. Therefore, the Project's impacts on groundwater would not combine with other areas of the City and the Project would not have a cumulatively considerable contribution to a cumulative impact on groundwater.

### Flooding and Runoff

The Project, in combination with other past, present, and future development in the City's stormwater drainage collection area that includes the Project site would contribute to runoff that could cumulatively result in off-site flooding, exceedances of the capacity of the City's stormwater drainage system, and/or contribute substantial runoff which would be an additional source of polluted runoff. Similar to the Project, cumulative projects would be subject to the City's SCAs that would also ensure that they would not contribute substantial runoff which would exceed the capacity of the City's stormwater drainage system, and provide reduction of stormwater runoff velocities, volume, and pollutant load thereby reducing the risk of substantial flooding on- or off-site and polluted runoff. Applicable NPDES Permit requirements and ordinances, and other water quality and stormwater control regulations, including SCA HYD-1, HYD-2, HYD-3, and UTIL-6, would reduce the Project's incremental contribution to a cumulative impact to flooding and runoff to a less-than-considerable level. Applicable creek permit requirements and the Creek Protection Plan ordinance, including SCA HYD-3 and HYD-4, would reduce the Project's incremental contribution to a cumulative impact to the Tidal Canal and Estuary. Therefore, the Project would not have a cumulatively considerable contribution to a cumulative impact with regard to flooding and runoff, and the impact would be less than significant.

Regarding risks associated with dam inundation or tsunamis, Impact HYD-4 above concluded that, given the Project site elevation and access to existing evacuation routes, the Project would not expose people or structures to a substantial risk of loss, injury, or death because of inundation. The Project would not combine with any other past, present, and future development in the Project vicinity that would increase the risk associated with dam failure or tsunami and therefore would not contribute to a cumulative impact.

**SCA HYD-1: State Construction General Permit.**

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.**

**SCA HYD-3: Vegetation Management on Creekside Properties.**

**SCA HYD-4: Creek Protection Plan.**

**SCA UTIL-5: Storm Drain System.** See Section 4.7.14.

**Mitigation:** None required.

---

## 4.7.7.6 References

Apex Companies, LLC. 2021. *Phase II Environmental Site Assessment Former Owens-Brockway Glass Facility 3600 Alameda Avenue Oakland, California*. October 27, 2021. Accessed April 26, 2022.

California Coastal Commission. 2021. *Sea Level Rise.* Accessed April 26, 2022. https://www.coastal.ca.gov/climate/slr/#:~:text=Given%20current%20trends%20in%20greenhouse,coast%20by%20the%20year%202100.

California Ocean Protection Council (OPC). 2018. *State of California Sea-Level Rise Guidance 2018 Update,* March 14, 2018. Accessed April 26, 2022. https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf.

City of Oakland. 1997. *Guide to Oakland's Creek Protection Ordinance, Oakland Municipal Code 13.16.* Accessed April 26, 2022. https://cao-94612.s3.amazonaws.com/documents/Guide-to-Creek-Protection-Ordinance.pdf.

City of Oakland. 2012. *General Plan, Safety Element*. Adopted 2004; amended 2012.

City of Oakland. 2017. *Oakland Preliminary Sea Level Rise Road Map.* Accessed April 26, 2022. https://cao-94612.s3.amazonaws.com/documents/oak068799.pdf.

City of Oakland. 2021. *2021-2026 Hazard Mitigation Plan,* July 2021. Accessed April 26, 2022. https://cao-94612.s3.amazonaws.com/documents/2021-07-01_OaklandHMP_AdoptedFinal-1.pdf.

City of Oakland. 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*. Adopted June 11, 1996.

Department of Water Resources (DWR). 2021. *Dam Breach Inundation Map Web Publisher*. Accessed January 20, 2022. https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2.

DWR. 2004. *Bulletin 118 – Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin,* last updated February 27, 2004. Accessed January 20, 2022. https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/2_009_04_East-BayPlainSubbasin.pdf.

DWR. 2022. *Inundation Maps.* Accessed May 16, 2022. https://water.ca.gov/programs/all-programs/division-of-safety-of-dams/inundation-maps#:~:text=An%20Inundation%20map%20shows%20flooding,maps%20and%20emergency%20action%20plans.

East Bay Municipal Utility District (EBMUD). 2020. *Dam Inundation Map for Hypothetical Failure of Central Main Dam Breach*, August 2020.

Kleinfelder Incorporated. 2021. *Geotechnical Investigation Report Industrial Warehouse Site, 3600 Alameda Avenue, Oakland, California,* May 26, 2021. Accessed January 20, 2022.

Metropolitan Transportation Commission and Association of Bay Area Governments (MTC and ABAG). 2021. *MTC/ABAG Hazard Viewer Map*. Accessed April 23, 2022. https://mtc.maps.arcgis.com/apps/webappviewer/index.html?id=4a6f3f1259df42eab29b35dfcd086fc8.

National Oceanic and Atmospheric Administration (NOAA). 2018. *Sea Level Trends*. Accessed April 26, 2022. https://tidesandcurrents.noaa.gov/sltrends/.

Oakland Museum of California. 2000. *Creek & Watershed Map of Oakland & Berkeley*. Accessed April 26, 2022. https://deh.acgov.org/landwater-assets/docs/Oakland-Berkeley-Creek-Map.pdf.

Regional Water Quality Control Board (RWQCB). 2019. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*. California Regional Water Quality Control Board, San Francisco Bay Region. Amended November 5, 2019. Accessed January 20, 2022. https://www.waterboards.ca.gov/sanfranciscobay/basin_planning.html.

Port of Oakland. 2019. *Sea Level Rise Assessment*. July 1, 2019. Accessed April 26, 2022. https://www.portofoakland.com/files/PDF/Task%207_20190709%20Port%20Oak%20SLR%20Assmt_Rev2.pdf.

# 4.7.8 Land Use and Planning

| *Issues (and Supporting Information Sources):* | | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|---|
| **XI.** | **LAND USE AND PLANNING —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) | Physically divide an established community; | ☐ | ☐ | ☒ | ☐ |
| 2) | Result in a fundamental conflict between adjacent or nearby land uses; | ☐ | ☐ | ☒ | ☐ |
| 3) | Fundamentally conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and actually result in a physical change in the environment; or | ☐ | ☐ | ☒ | ☐ |
| 4) | Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan. | ☐ | ☐ | ☐ | ☒ |

## 4.7.8.1 Environmental Setting

### *Surrounding Land Uses*

The Project site is surrounded primarily by commercial uses, with some single-family residential areas to the north and west. A residential community, referred to as Jingletown, exists between the Project site and I-880 to the north. The area north of the Project site also includes a few commercial establishments, including a roofing company, and surface parking lots. A large Home Depot building supply store with an associated parking lot and a McDonald's restaurant occupy the land between the I-880 and Alameda Avenue east of the Project site. Existing uses to the southeast of the Project site, between Alameda Avenue and the Tidal Canal of the estuary, include commercial uses (e.g., JCW Cabinets & Stone, Bay Island Gymnastics) and surrounding surface parking. The Tidal Canal separating Oakland from the City of Alameda runs south and parallel to Alameda Avenue, the southern border of the Project site. Existing uses to the east include more commercial uses (e.g., a cosmetics store, sales store, motor shop) and single-family housing.

### *Existing General Plan Designations and Zoning*

The General Plan land use designation for the Project site is Estuary Policy Plan Heavy Industrial (EPP HI). The intent of the EPP HI designation is to retain the existing glass recycling and manufacturing functions within the area and promote an enhanced relationship with the adjoining residential neighborhood, Fruitvale Avenue, and the waterfront. In addition, future development in this designated area is intended to be primarily heavy industrial uses.

The Project site is located in the Central Estuary District Industrial Zone – 6 (D-CE-6), and is included in the Central Estuary Area Plan, which is described below. The intent of this designation is to create, preserve, and enhance areas of the Central Estuary that are appropriate

for a wide variety of businesses and related commercial and industrial establishments. Industrial and manufacturing uses, transportation facilities, warehouse and distribution and other similarly related supporting uses are permitted in this zone.

## 4.7.8.2 Regulatory Setting

### *City of Oakland General Plan*

The Oakland General Plan establishes comprehensive, long-term land use policies for the City and provides the primary policy direction for development throughout the City and therefore the Project site. The General Plan consists of a series of "elements," each of which deals with a particular topic, and includes policies, many of which guide development citywide.

The Oakland General Plan Land Use and Transportation Element (LUTE) contains the following land use policies that address issues related to land use and planning, and/or are particularly relevant to the Project (City of Oakland, 2007).

**Industry and Commerce Policies**

***Policy I/C1.8: Providing Support Amenities Near Employment Centers.*** Adequate cultural, social, and support amenities designed to serve the needs of workers in Oakland should be provided within close proximity of employment centers.

***Policy I/C1.9: Locating Industrial and Commercial Area Infrastructure.*** Adequate public infrastructure should be ensured within existing and proposed industrial and commercial areas to retain viable existing uses, improve the marketability of existing vacant or underutilized sites, and encourage future use and development of these areas with activities consistent with the goals of this Plan.

***Policy I/C2.1 Pursuing Environmental Clean-Up.*** The environmental cleanup of contaminated industrial properties should be actively pursued to attract new users in targeted industrial and commercial areas.

***Policy I/C2.3 Providing Vacant or Buildable Sites.*** Development in older industrial areas should be encouraged through the provision of an adequate number of older or vacant buildable sites designated for future development.

***Policy I/C.4.1: Protecting Existing Activities.*** Existing industrial, residential, and commercial activities and areas which are consistent with long term land use plans for the City should be protected from the intrusion of potentially incompatible land uses.

***Policy I/C4.2: Minimizing Nuisances.*** The potential for new or existing industrial or commercial uses, including seaport and airport activities, to create nuisance impacts on surrounding residential land uses should be minimized through appropriate siting and efficient implementation and enforcement of environmental and development controls.

**Transportation and Transit-Oriented Development Policies**

***Policy T2.1: Encouraging Transit-Oriented Development.*** Transit-oriented development should be encouraged at existing or proposed transit nodes, defined by the convergence of two or more modes of public transit such as BART, bus, shuttle service, light rail or electric trolley, ferry, and inter-city or commuter rail.

***Policy T2.2: Guiding Transit-Oriented Development.*** Transit-oriented developments should be pedestrian oriented, encourage night and day times use, provide the neighborhood with needed goods and services, contain a mix of land uses, and be designed to be compatible with the character of surrounding neighborhoods.

***Policy T4.1: Incorporating Design Features for Alternative Travel.*** The City will require new development, rebuilding, or retrofit to incorporate design features in their projects that encourage the use of alternative modes of transportation such as transit, bicycling, and walking.

***Policy T6.2: Improving Streetscapes.*** The City should make major efforts to improve the visual quality of streetscapes. Design of the streetscape, particularly in neighborhoods and commercial centers, should be pedestrian oriented, include lighting, directional signs, trees, benches, and other support facilities.

**Waterfront Policies**

***Policy W2.2: Buffering of Heavy Industrial Uses.*** Appropriate buffering measures for heavy industrial uses and transportation uses on adjacent neighborhoods should be developed and implemented.

***Policy W7.2: Encouraging Commercial and Industrial Uses.*** Other commercial and industrial uses should be encouraged at appropriate locations (Port-owned or not) where they can provide economic opportunity to the community at large.

***Policy W12.2 Defining Fruitvale Waterfront Land Uses.*** This area should allow for the current use of existing industry and manufacturing uses as well as residential use; however, the area should be promoted for uses that better utilize the waterfront's unique position in the City. Depending on the level of intensity, uses that can benefit from close proximity to the airport and business park may be appropriate. Commercial businesses, recreation, and housing should be able to coexist in this area with appropriate buffering measures.

***Policy W12.4 Defining Mixed Use Characteristics.*** The mixed use characteristics for the area should incorporate office, commercial, and industrial uses, with recreation facilities and housing where appropriate and feasible.

***Policy W12.5 Mitigating Land Use Conflicts.*** Since this area is and may continue to be an area that has a variety of uses including industrial, incompatibilities should be mitigated through appropriate site planning, landscaping, and buffering.

**Neighborhood Policies**

***Policy N1.1: Concentrating Commercial Development.*** Commercial development in the neighborhoods should be concentrated in areas that are economically viable and provide opportunities for smaller scale, neighborhood-oriented retail.

### *Estuary Policy Plan*

The Estuary Policy Plan (EPP) is part of the General Plan and contains objectives and policies to enhance the future of the area of Oakland between Adeline Street, the Nimitz Freeway (I-880), 66th Avenue, and the Estuary shoreline (City of Oakland, 1999). The plan proposes the following

land use policies that address issues related to the land uses and planning, and/or are particularly relevant to the Project.

> ***Policy LU-5:*** Retain the existing industrial use of the Owens-Brockway site.
>
> ***Policy LU-5.1:*** Improve the compatibility between industrial and residential uses, and enhance the relationship of the plant with the waterfront.

### *Oakland Planning Code and Zoning Ordinance*

The Planning Code serves to implement General Plan policies and is found in the Oakland Municipal Code, Title 17. The Planning Code governs land uses and development standards, such as building height, bulk and setback, for specific zoning districts within Oakland.

### *Central Estuary Area Plan*

The Project site is zoned D-CE-6, Central Estuary District Industrial Zone-6. The intent of the D-CE-6 designation is to create, preserve, and enhance areas of the Central Estuary for a wide variety of businesses and related commercial and industrial establishments that may have the potential to generate off-site impacts (e.g., noise, light, odor, and traffic). This zoning designation allows for heavy industrial and manufacturing uses, transportation facilities, warehousing and distribution, and similar related uses (OMC Chapter 17.101E).

> ***Policy CE-5:*** Allow the existing industrial use of the Owens-Brockway site.
>
> ***Policy CE-5.1:*** Improve the compatibility between industrial and residential uses, and enhance the relationship of the Owens-Brockway plant with the waterfront.

## 4.7.8.3 Topics Considered and No Impact Determined

The following topic is considered to have no impact caused by the Project based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, this topic is not addressed further in this document for the following reasons:

- ***Conflict with natural community conservation plans*** (Criterion 4). The Project site is not located within or in proximity to an area guided by a Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, development of the Project would not conflict with such plans and no impact would occur. This criterion is also discussed in Section 2.4, *Biological Resources*.

## 4.7.8.4 Project Impacts and Discussion

### *Physical Division of an Established Community*

**Impact LUP-1: The Project would not physically divide an established community. (Criterion 1) (*Less than Significant*)**

Physically dividing an established community means the creation of barriers that prevent or hinder the existing flow of people or goods through an established community, or the placement

of a development in such a manner that it physically separates one portion of an established community from the remainder of that community. The construction of a new major highway through an existing residential neighborhood would constitute a typical example of a physical division of an established community.

The Project vicinity is somewhat enclosed by I-880 to the north and the Tidal Canal to the south. Existing uses within this area are primarily commercial and industrial, with single-family residential to the north and east of the Project site. The Project would replace the recently vacated industrial facility with a new industrial facility – a distribution warehouse. Therefore, the Project would not introduce a different land use to the Project site nor change the existing land use pattern such that an existing established community would be divided. Various components of the Project would improve connectivity between surrounding land uses. Specifically, the Project would upgrade and reconstruct surrounding sidewalks, open Boehmer Street which is currently closed and gated, extend 37th Avenue through to Alameda Avenue, and shift Alameda Avenue approximately 100 feet inland to increase public access to the shoreline and Bay Trail. Considering the Project would not introduce a different land use and would improve connections surrounding the Project site, the Project would not physically divide an established community, and the impact would be less than significant.

**Mitigation:** None required.

---

### *Land Use Compatibility*

**Impact LUP-2: The Project would not result in a fundamental conflict between adjacent or nearby land uses. (Criterion 2) (*Less than Significant*)**

A fundamental conflict with adjacent or nearby land uses means that the character of activities associated with one land use is in fundamental conflict with the uses of adjacent land, or the characteristics of one land use disrupts or degrades adjacent land uses to such a degree that the functional use of the adjacent land for its existing or planned purpose is imperiled.

As noted above, the Project would not introduce a different land use to the Project site nor change the existing land use pattern. Although there are residential areas north and east of the Project site, other surrounding uses include big box retail surrounded by surface parking lots, warehouses and light industrial uses. The Project would be consistent with existing land uses and compatible with nearby commercial retail and residential uses. Further, the Project site plan includes a buffer between the closest sensitive land uses and the proposed industrial facility and associated activities. The site plan places employee parking to the north of the proposed building, and a 20-foot-wide landscaping area between the proposed parking lot and the northern Project site boundary. Together, the parking lot and landscape area would create a 91-foot buffer between the building and the northern Project site boundary. The land dedicated to the City for a potential future East 7th Street extension would provide an additional buffer between the proposed project building and the residential uses to the north. In addition, all truck loading would be located at the south end of the building, away from residential uses. Therefore, the Project would not result in a

fundamental conflict between adjacent or nearby land uses and the impact would be less than significant.

**Mitigation:** None required.

---

### *Consistency with Land Use Plans and Policies*

**Impact LUP-3: The Project would not fundamentally conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and result in a physical change in the environment. (Criterion 3) (*Less than Significant*)**

#### Plan Bay Area 2040

The Association of Bay Area Governments (ABAG) and Metropolitan Planning Commission's (MTC) *Plan Bay Area 2040* integrates transportation, land use, and housing to meet greenhouse gas reduction targets for the San Francisco Bay Area region. Regarding land use, *Plan Bay Area 2040* focuses growth and development in Priority Development Areas (PDAs) and Transit Priority Areas (TPAs), which are served by public transit and have been identified as appropriate for additional, compact development (ABAG and MTC, 2017). The Project is in a TPA, as it is within 0.5-mile of a major transit stop (Fruitvale BART station). The Project is located within the San Antonio & Central Estuary PDA (MTC, 2020). The San Antonio & Central Estuary PDA is characterized as a mixed-use corridor, which is defined as an area of economic and community activity with rail, streetcar, or high frequency bus service that lacks a distinct center (ACTC 2017). The Project would develop an industrial facility, the operation of which would support economic activity and align with the character of the San Antonio & Central Estuary PDA. Therefore, Project impacts related to conflicts with regional land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect would be less than significant.

#### General Plan/Estuary Policy Plan

The General Plan land use designation for the Project site is Estuary Policy Plan Heavy Industrial (EPP HI). The HI designation applies specifically to the previous Owens-Brockway facility and is intended to retain the "existing glass recycling and manufacturing functions within this area and promote and enhanced relationship with the adjoining Jingletown/Elmwood neighborhood, Fruitvale Avenue, and the waterfront." This designation intends for future development on the site to be primarily heavy industrial uses.

The Project would redevelop the vacant industrial site with an approximately 430,000 square foot new industrial facility, intended as a distribution warehouse, including 30,000 square feet of accessory office space and possible future development of an approximately 10,000 square-foot café/restaurant. The Project would include an employee parking lot and a 20-foot-wide landscaping area on the northern side of the building resulting in an overall 91-foot buffer between the proposed building and the northern Project site boundary. The land dedicated to the City for a potential future East 7th Street extension would provide an additional buffer between

the proposed project building and the residential uses to the north. The Project site design includes additional landscaped areas, sidewalks surrounding the property would be re-constructed, and shoreline access would be enhanced by the realigned Alameda Avenue.

In addition, the Project Applicant has performed environmental due diligence to characterize potential soil and groundwater contamination on the site left by former heavy industrial uses and to address site remediation. The Project Applicant is working with the U.S. EPA to mitigated existing hazardous materials and has prepared a Cleanup Plan (see Section 4.4, *Hazards and Hazardous Materials*).

Overall, the Project would be consistent with General Plan Policies including those related to pursuing environmental clean-up, locating industrial uses and protecting existing industrial activities, improving streetscapes, and buffering heavy industrial uses. In addition, the Project would be consistent with the policies of the Estuary Policy Plan as it would retain the existing industrial use, improve the compatibility between industrial and residential uses, and provide new commercial activities. Therefore, the Project would not fundamentally conflict with the City's General Plan and the impact would be less than significant.

### Planning Code and Zoning Map

The Project site is zoned Central Estuary District Industrial Zone – 6 (D-CE-6). The D-CE-6 Zone is intended to create, preserve, and enhance areas of the Central Estuary that are appropriate for a wide variety of businesses and related commercial and industrial establishments that may have the potential to generate offsite impacts, such as noise, light/glare, odor, and traffic. This zoning designation allows for industrial and manufacturing uses, transportation facilities, warehousing and distribution, and similar related supporting uses. The Project would construct a new industrial facility intended as a distribution warehouse and would be consistent with the D-CE-6 zoning designation.

### Central Estuary Area Plan

As noted above, the Project site is zoned D-CE-6, which is intended, in part, to preserve and enhance areas for industrial establishments that may have the potential to generate off-site impacts. The Project would maintain the existing industrial use which is consistent with the zoning designation and Policy CE-5. Consistent with Policy CE-5.1, the Project would improve compatibility between land uses by improving the surrounding streetscape for pedestrians and bikes, improving shoreline access, and providing a 91-foot buffer between the proposed industrial operations and the northern Project site boundary. The land dedicated to the City for a potential future East 7th Street extension would provide an additional buffer between the proposed project building and the residential uses to the north. Therefore, the new industrial facility would not fundamentally conflict with the policies laid out in the Central Estuary Area Plan and the impact would be less than significant.

**Mitigation:** None required.

### 4.7.8.5 Cumulative Impacts

**Impact LUP-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact to land use and planning. (*Less than Significant*)**

The cumulative geographic context for land use, plans and policy considerations for the development of the Project consists of the areas surrounding the Project site and citywide.

As discussed under Impacts LUP-1 through LUP-3, the Project would not result in a significant land use impact by potentially physically dividing an established community; conflicting with adjacent or nearby land uses; or conflicting with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. All other cumulative development has been, or will be, subject to development guidance contained within the General Plan, prescribed by zoning, and other applicable land use plans and specific plans to ensure consistency. Therefore, the Project contribution to any potential cumulative impacts related to land use and planning would be less than significant.

**Mitigation:** None required.

---

### 4.7.8.6 References

Association of Bay Area Governments and Metropolitan Transportation Commission (ABAG and MTC). 2017a. *Plan Bay Area 2040, Final*. Adopted July 26, 2017. Accessed January 20, 2022. http://files.mtc.ca.gov/library/pub/30060.pdf.

Alameda County Transportation Commission (ACTC). 2017. *Alameda County Priority Development Area Investment and Growth Strategy*. May 2017. Accessed April 26, 2022. https://www.alamedactc.org/wp-content/uploads/2018/11/2017_AlamedaCounty_PDA_IGS.pdf.

City of Oakland. 1999. *Estuary Policy Plan*. June 1999. Accessed January 20, 2022. https://cao-94612.s3.amazonaws.com/documents/oak035256.pdf.

City of Oakland. 2007. *Land Use and Transportation Element of the Oakland General Plan*. March 24, 1998, amended to June 21, 2007. Accessed January 28, 2022. https://oaklandca.s3.us-west-1.amazonaws.com/oakca1/groups/ceda/documents/webcontent/oak035268.pdf.

City of Oakland. 2020. *Oakland Planning Code*. 1997. Updated June 9, 2020. Accessed January 20, 2022. https://cao-94612.s3.amazonaws.com/documents/Planning-Code-after-7-28-20-RV-Parking_Living-Amendments.pdf.

City of Oakland. 2021. *Central Estuary Area Plan*. April 5, 2013; last updated January 20, 2021. Accessed April 26, 2022. https://www.oaklandca.gov/resources/download-the-central-estuary-area-plan.

Metropolitan Transportation Commission (MTC). 2020. Priority Development Areas (*Plan Bay Area 2040*), July 27, 2020. Available at: https://opendata.mtc.ca.gov/datasets/priority-development-areas-plan-bay-area-2040/explore?location=37.793511%2C-122.205906%2C12.63, accessed January 28, 2022.

# 4.7.9 Mineral Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XII. MINERAL RESOURCES —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) 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 | ☐ | ☐ | ☐ | ☒ |
| 2) 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. | ☐ | ☐ | ☐ | ☒ |

## 4.7.9.1 Environmental Setting

The Project site is located within the Oakland East Quadrangle on land classified by the California Department of Conservation's (DOC's) Division of Mines and Geology as Mineral Resource Zone 1 (MRZ-1), or an area where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence (DOC, 1987; 2020). The Project site is not zoned for, or immediately adjacent to, lands designated as a mineral resource zone by the City's General Plan (City of Oakland, 2015; 2018).

## 4.7.9.2 Topics Considered and No Impact Determined

Since the Project site is located on land with little likelihood for significant mineral deposits and is not zoned for, or immediately adjacent to, lands designated as a mineral resource zone by the City's General Plan, the Project would not interfere with any mineral extraction operations, and would not result in the loss of land designated for mineral resources. As such, the Project would not result in the loss of availability of a known mineral resource and would not result in the loss of a locally important mineral resource recovery site. Therefore, no impact to mineral resources would occur.

## 4.7.9.3 Cumulative Impacts

Because the Project would have no impact to mineral resources, it would not cause or contribute to any potential cumulative impact to such resources.

## 4.7.9.4 References

California Department of Conservation (DOC), Division of Mines and Geology. 1987. *Special Report 146, Part II, Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area*. Oakland East Quadrangle, Plate 2.19. 1987. Accessed February 25, 2022. https://ia902602.us.archive.org/35/items/minerallandclass00stin/minerallandclass00stin.pdf.

DOC. 2020. *State Mining and Geology Board Guidelines, Guidelines for Classification and Designation of Mineral Lands*. Accessed February 25, 2022. https://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf.

City of Oakland. 2015. *General Plan Designations*. Planning & Building Department. May 19, 2015. Accessed December 30, 2020. https://cao-94612.s3.amazonaws.com/documents/General-Plan-Designations-20150519.pdf.

City of Oakland. 2018. *City of Oakland Zoning and Estuary Policy Plan Maps.* Bureau of Planning. December 11, 2018. Accessed December 30, 2020. https://cao-94612.s3.amazonaws.com/documents/Zoning_EPP_Map_20181211.pdf.

# 4.7.10 Population and Housing

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XIV. POPULATION AND HOUSING —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) Induce substantial population growth in a manner not contemplated in the General Plan, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extensions of roads or other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed; | ☐ | ☐ | ☒ | ☐ |
| 2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element; or | ☐ | ☐ | ☐ | ☒ |
| 3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element. | ☐ | ☐ | ☐ | ☒ |

## 4.7.10.1 Environmental Setting

### *Employment*

In March 2022, the City of Oakland had approximately 202,800 jobs (EDD, 2022). According to the Association of Bay Area Governments (ABAG) and Metropolitan Planning Commission's (MTC) *Plan Bay Area 2040*, Oakland's employment is projected to grow by 93,660 jobs in the 30-year period from 179,100 jobs in 2010 to 272,760 jobs in 2040 (ABAG, 2017).

## 4.7.10.2 Regulatory Setting

### *Oakland Municipal Code*

Chapter 15.68 of the Oakland Municipal Code establishes a Jobs/Housing Impact Fee in the City of Oakland to assure that certain commercial development projects compensate and mitigate for the increased demand for affordable housing generated by such development projects within the City of Oakland.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on population and housing and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to population and housing. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA POP-1: Jobs/Housing Impact Fee.** *(Standard Condition of Approval 71)*

**Requirement:** The project applicant shall comply with the requirements of the City of Oakland Jobs/Housing Impact Fee Ordinance (chapter 15.68 of the Oakland Municipal Code).

## 4.7.10.3 Topics Considered and No Impact Determined

The following topic is considered to have no impact caused by the Project based on the proposed Project characteristics, its geographical location, and underlying site conditions. Therefore, this topic is not addressed further in this document for the following reasons:

- ***Displacement*** (Criteria 2 and 3). The Project site is currently occupied by the former Owens-Brockway Glass manufacturing facility. Therefore, construction of the Project would not displace any existing housing units or substantial numbers of people necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element, and no impact would occur.

## 4.7.10.4 Project Impacts and Discussion

### *Population Growth*

**Impact POP-1: The Project would not induce substantial population growth in a manner not contemplated in the General Plan, either directly or indirectly, such that additional infrastructure is required. (Criterion 1) (*Less than Significant*)**

Project construction would involve temporary employees and the Project would generate an estimated 350 permanent employees.[13] According to the *Plan Bay Area 2040*, the City is projected to have an increase of approximately 93,700 jobs between 2010 and 2040. As of March 2022, the City experienced an increase of roughly 23,700 jobs since 2010 for an estimated total of 202,800 jobs (EDD, 2022). Additionally, the General Plan land use designation for the Project site is Estuary Policy Plan Heavy Industrial (EPP HI), which supports the uses proposed. The CEAP EIR also anticipated ongoing industrial operations on the Project site. The approximately 350 jobs added by the Project would therefore represent a marginal fraction of the projected and planned growth in the City. Therefore, the Project would not directly or indirectly induce unplanned substantial population growth requiring new infrastructure, and the impact would be less than significant.

While not required to reduce any significant effects related to population and housing, SCA POP-1, Jobs/Housing Impact Fee is applicable to the Project and would require the Project Applicant to comply with the City of Oakland Jobs/Housing Impact Fee Impact Fee Ordinances.

**SCA POP-1: Jobs/Housing Impact Fee.**

[13] Although the Central Estuary Implementation Guide Draft SEIR estimates a gross floor area per employee ratio of 700 square feet/employee for industrial uses, the Project Applicant estimates approximately 350 employees would be required for a warehouse distribution center of this size.

**Mitigation:** None required.

---

## 4.7.10.5 Cumulative Impacts

**Impact POP-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact to population and housing. (*Less than Significant*)**

The geographic context for cumulative impacts to population and housing is the City of Oakland. The Project in combination with past, present, and reasonably foreseeable future development in the City would lead to an increase in employment growth. However, as described under Impact POP-1 above, the approximately 350 jobs added by the Project would represent a marginal fraction of the City's projected and planned employment growth. Thus, the Project would not contribute to any potential cumulative substantial unplanned employment growth in the City, and the impact would be less than significant.

**SCA POP-1: Jobs/Housing Impact Fee.**

**Mitigation:** None required.

---

## 4.7.10.6 References

Association of Bay Area Governments and Metropolitan Planning Commission (ABAG and MTC). 2017. *Plan Bay Area 2040, Projections 2040 Forecasts for Population, Household and Employment for the Nine County San Francisco Bay Area Region*. July 2017. Accessed January 27, 2022. http://projections.planbayarea.org/.

California Employment Development Department (EDD), 2020. Labor Force and Unemployment Rate for Cities and Census Designated Places (CDP), Current Month, January 21, 2022. Available at: https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html, accessed April 26, 2022.

---

# 4.7.11 Public Services

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XV. PUBLIC SERVICES —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 following public services: | | | | |
| a) Fire protection; | ☐ | ☐ | ☒ | ☐ |
| b) Police protection; | ☐ | ☐ | ☒ | ☐ |
| c) Schools; or | ☐ | ☐ | ☒ | ☐ |
| d) Other public facilities. | ☐ | ☐ | ☒ | ☐ |

## 4.7.11.1 Environmental Setting

### *Fire Protection and Emergency Medical Response*

The Oakland Fire Department (OFD) provides fire protection services and emergency medical services for the Project site and throughout the City of Oakland. Fire Station 13 (1225 Derby Avenue) is the closest station to the Project site, located approximately 0.37 miles to the north. OFD aims to provide emergency service within 7 minutes of notification 90 percent of the time. Generally, service can be provided in that timeframe to areas located within 1.5 miles of a fire station (City of Oakland, 2012).

### *Police Protection*

The Oakland Police Department (OPD) provides police services for the Project site and throughout the City of Oakland. The Project site is located in Patrol Area 4, traditionally known as East Oakland/Mills/Leona, and Police Beat 23X which includes the Saint Elizabeth neighborhood and portions of the Fruitvale neighborhood of the City (OPD, 2021). Incoming calls for police services are ranked as follows: Priority 1 refers to imminent danger, death, serious injury, felonies in progress, or serious public health hazards; Priority 2 refers to disputes with potential for violence, misdemeanor crimes in progress, stolen vehicle reports, and similar matters; and Priority 3 refers to reports of incidents that do not present danger to life or property (City of Oakland, 2019).

### *Public Schools*

The Project site is served by the Oakland Unified School District (OUSD). Across Oakland, the OUSD operates 87 schools, including 49 elementary schools, 5 grade K–8 schools, 14 middle schools, 1 alternative middle school, 3 grade 6-through-12 schools, 7 high schools, 7 alternative

or continued-education schools, and 1 independent study school. There are also 34 OUSD-authorized charter schools.

### *Other Public Facilities*

Other public facilities in the City include public libraries. The Oakland Public Library system consists of a downtown Main Library, 16 neighborhood branches, and 3 special collection libraries – the African American Museum and Library at Oakland, the Oakland History Room, and the Temescal Tool Lending Library.

## 4.7.11.2 Regulatory Setting

### *Senate Bill 50*

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50 (SB 50), authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities, and restricts the ability of local agencies to deny project approvals on the basis that public school facilities (classrooms, auditoriums, etc.) are inadequate. School impact fees are collected at the time when building permits are issued. Payment of school fees is required by SB 50 for all new development projects and is considered full and complete mitigation of any school impacts. School impact fees are payments to offset capital cost impacts associated with new developments, which result primarily from costs of additional school facilities, related furnishings and equipment, and projected capital maintenance requirements. As such, agencies cannot require additional mitigation for any impacts on school facilities or due to the inadequacy of school facilities.

### *City of Oakland General Plan*

The City of Oakland General Plan Land Use and Transportation Element (LUTE) and Safety Element contain objectives, policies, and actions to ensure public facilities and services are adequately available and accessible in a timely fashion to serve new development (City of Oakland, 2007 & 2012).

The following objectives and policies within the Neighborhoods section of the LUTE, apply Citywide and are relevant to the Project:

> **Objective N.12:** Provide adequate infrastructure to meet the needs of Oakland's growing community.
>
> > ***Policy N.12.1:*** The development of public facilities and staffing of safety-related services, such as fire stations, should be sequenced and timed to provide a balance between land use and population growth, and public services at all times.
> >
> > ***Policy N.12.2:*** Adequate public school capacity should be available to meet the needs of Oakland's growing community. The City and the Oakland Unified School District (OUSD) should work together to establish a continuing procedure for coordinating residential and commercial development and exploring the imposition of mutually agreed upon reasonable and feasible strategies to provide for adequate school capacity. The City and OUSD should jointly consider, where feasible and appropriate, funding mechanisms

such as assessment districts, redevelopment Agency funding (AB 1290), uses of surplus City-owned land, bond issues, and adjacent or shared use of land or school facilities with recreation, libraries, child care and other public uses.

The following policies and actions within the Public Safety and Fire Hazards sections of the Safety Element of the General Plan apply Citywide and are relevant to the Project:

***Policy PS-1*:** Maintain and enhance the City's capacity to prepare for, mitigate, respond to and recover from disasters and emergencies.

***Action PS-1.1:*** Continue to maintain the City's Emergency Operations Center in a fully functioning state of readiness.

***Action PS-1.2:*** Maintain and update as necessary the Oakland Standardized Emergency Management System Plan.

***Action PS-1.4:*** Continue to collaborate with adjoining jurisdictions on the network of outdoor warning sirens, and to test the sirens on a monthly basis.

***Action PS-1.5:*** Continue to offer community training on emergency prevention, preparedness, and response as part of the CORE program.

***Policy FI-1*:** Maintain and enhance the City's capacity for emergency response, fire prevention and fire-fighting.

***Action FI-1.1*:** Periodically assess the need for new or relocated fire stations and other facilities, changes in staffing levels, and additional or updated supplies, equipment, technologies and in-service training classes.

***Action FI-1.2*:** Strive to meet a goal of responding to fires and other emergencies within seven minutes of notification 90 percent of the time.

***Action FI-1.4:*** Continue to sponsor the formation of CORE teams.

***Action FI-1.5:*** Continue to participate not only in general mutual-aid agreements but also in agreements with adjoining jurisdictions for cooperative response to fires.

***Action FI-1.6:*** Continue to conduct monthly tests of the alerting and warning system's outdoor sirens, coordinating them to the extent possible with those of neighboring jurisdictions.

***Policy FI-2*:** Continue, enhance or implement programs that seek to reduce the risk of structural fires.

***Action FI-2.1:*** Adopt and amend as needed updated versions of the California building and fire codes so that optimal fire-protection standards are used in construction and renovation projects.

***Action FI-2.3:*** Continue to review development proposals to ensure that they incorporate required and appropriate fire-mitigation measures, including adequate provisions for occupant evacuation and access by fire-fighting personnel and equipment.

### *Oakland Municipal Code*

Oakland Municipal Code, Chapter 15.74, Transportation and Capital Improvement Fees, establishes Citywide transportation and capital improvements impact fees in the City of Oakland to assure that development projects pay their fair share to compensate for the increased demand for transportation and capital improvements infrastructure generated by development projects within the City. Funds deposited into the Capital Improvements Impact Fee Fund are used to pay for projects that are required for fire, police, library, parks and recreation, or storm drain services.

Oakland Municipal Code, Chapter 15.12 contains the Oakland Fire Code. The Oakland Fire Code was updated in 2016 to adopt the most recent California Fire Code and includes amendments to the California Fire Code specific to the City of Oakland in response to local climatic, geological, or topographical conditions. The Fire Prevention Bureau within the OFD assists the Fire Chief in the administration and enforcement of the provisions of the Oakland Fire Code. The Fire Prevention Bureau provides plan checking services that assure the incorporation of proper life safety standards, as well as code compliance, in all new construction in the City and oversees inspection services related to compliance with the state and local fire codes.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on public services and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to public services. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA PUB-1: Capital Improvements Impact Fee.** *(Standard Condition of Approval 73)*

**Requirement:** The project applicant shall comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).

## 4.7.11.3 Project Impacts and Discussion

**Impact PUB-1: The Project would not result in an increase in demand for fire protection and emergency medical response services that would require new or physically altered fire protection facilities to maintain acceptable service ratios, response times, or other performance objectives, construction of which could have significant physical environmental impacts. (Criterion 1.a) (*Less than Significant*)**

The Project would increase the demand for fire protection and emergency medical response services due to the introduction of new site operations and an estimated 350 new employees on the Project site (see Section 4.7.10, *Population and Housing*). The associated increase in the demand for fire protection services would not be substantial and would be typical for the surrounding neighborhood comprised of commercial, light industrial, and residential uses. As discussed in Section 4.7.11.1, *Environmental Setting*, Fire Station 13 is located 0.37 miles north

of the Project site, and OFD is generally able to meet its response-time goals in areas located within 1.5 miles of a fire station (City of Oakland, 2012). In addition, the Project would open Boehmer Street, which extends between 36th and 37th Avenues and is currently closed and gated. The Project would also extend 37th Avenue from the current cul-de-sac south of Boehmer Street to Alameda Avenue along the east side of the Project site. This extension would provide a new north-south connection. Overall, the Project would improve circulation around the Project site and through the surrounding area, which will benefit existing response access.

The Project would be designed to comply with the most up-to-date building and fire codes and include fire safety measures and equipment, including but not limited to, use of fire retardant building materials, inclusion of emergency water infrastructure (fire hydrants and sprinkler systems), installation of smoke detectors and fire extinguishers, installation of emergency response notification systems, and provision of adequate emergency access to the Project site for emergency vehicles and personnel. Project fire safety plans would be subject to review and approval by the OFD. Therefore, the Project would not generate an unusual or substantial increased demand for fire services that would require new or physically altered fire facilities to serve the Project's demand and no impacts associated with the construction of such facilities would occur. The impact would be less than significant.

The Project would generate a net increase in property taxes and other fees, providing additional funds to the City's General Fund, which the City allocates in part to cover increased operational costs, such as additional fire personnel to meet increased needs from development. Also, the Project would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved fire facilities needed to provide expanded services in the City. Facilities developed as a result of the City's Capital Improvements Fee, funded in part by the Project, or by other means, would be required to undergo environmental review as they are identified.

**SCA PUB-1: Capital Improvements Impact Fee.**

**Mitigation:** None required.

---

**Impact PUB-2: The Project would not result in an increase in demand for police services that would require new or physically altered police facilities to maintain acceptable service ratios, response times, or other performance objectives, construction of which could have significant physical environmental impacts. (Criterion 1.b) (*Less than Significant*)**

The Project would result in an estimated 350 new employees on the Project site (see Section 4.7.10, *Population and Housing*). The associated increase in the demand for police services, particularly since the current site has not been operational for several years, would not be substantial and would be typical of the demand for the surrounding neighborhood comprised of commercial, light industrial, and residential uses. As noted above, the Project site is in Patrol Area 2, Police Beat 23X and nearby services and patrols are already available. Various components of the Project would improve safety within and surrounding the Project site. The

Project would upgrade and reconstruct surrounding sidewalks and implement a new intersection at Alameda Avenue and 37th Avenue. Compared with the existing vacant site, the Project would activate the site with employees and appropriate safety lighting. Therefore, the Project would not generate an unusual or substantial increased demand for police services or require new or physically altered police facilities to serve the Project's demand and no impacts associated with the construction of such facilities would occur. The impact would be less than significant.

As discussed above for Fire Projection (Impact PUB-1), the Project would also generate a net increase in property taxes and other fees providing additional funds for the City's General Fund, which the City allocates in part to cover costs associated with increase operational costs such as additional police personnel. Also similarly, the Project would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved police facilities needed to provide expanded services. Facilities developed as a result of the City's Capital Improvements Fee, funded in part by the Project, or by other means, would be required to undergo environmental review as they are identified.

**SCA PUB-1: Capital Improvements Impact Fee.**

**Mitigation:** None required.

---

### *Public Schools*

**Impact PUB-3: The Project would not result in an increase in new students for public schools at a level that would require new or physically altered school facilities to maintain acceptable service ratios or other performance objectives, construction of which would have significant physical environmental impacts. (Criterion 1.c) (*Less than Significant*)**

No residential units are proposed as part of the Project. Therefore, the Project would not directly generate new students. The Project's new employment could indirectly generate new students in OUSD's service area from potential new employed-residents, assuming those residents may elect to reside in Oakland and/or enroll their students in OUSD schools; however, pursuant to SB 50, the Project would be required to pay school impact fees established to offset potential impacts from new development on school facilities. Therefore, although the Project could potentially indirectly increase student enrollment in OUSD's service area, payment of fees mandated under SB 50 is the mitigation measure prescribed by the statute, and payment of such fees is deemed full and complete mitigation of Project impacts on school facilities. Therefore, Project impacts to public schools would be less than significant.

**Mitigation:** None required.

---

### *Other Public Facilities*

**Impact PUB-4: The Project would not result in an increase in demand for other public facilities, including libraries, at a level that would require new or physically altered library facilities in order to maintain acceptable service ratios or other performance objectives, construction of which would have significant physical environmental impacts. (Criterion 1.d) (*Less than Significant*)**

The Project would result in an estimated 350 new employees on the Project site (see Section 4.7.10, *Population and Housing*). No residential units are proposed as part of the Project, and no residential population increase would occur. Thus, the Project would result in limited demand for other City services such as libraries, and no new or physically altered library or other public facilities would be required to serve the Project's demand.

The Project would also generate a net increase in property taxes and other fees providing additional funds for the City's General Fund, which the City allocates in part to cover increased operational costs, such as the hire of additional library staff. The Project would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved library facilities needed to provide expanded services in the City. The Project's impact on libraries and other public facilities would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.**

**Mitigation:** None required.

---

## 4.7.11.4 Cumulative Impacts

**Impact PUB-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in an adverse cumulative increase in demand for public services that would require new or physically altered governmental facilities, construction of which could have significant physical environmental impacts. (*Less than Significant*)**

The geographic context for cumulative impacts to public services is citywide, including the service areas for OFD, OPD, OUSD, and the Oakland Public Library. Cumulative development in the Project vicinity and citywide would generate a need for additional fire, police, public school, and library facilities. These public services are subject to annual budgeting processes during which service priorities are established and service levels are monitored, allowing for adjustments where needed. Changes in demand for all these services are expected to occur incrementally, allowing for carefully planned expansions of existing facilities. Any expansions would be likely to occur on sites already occupied by existing service providers.

Similar to the Project, cumulative projects would be subject to the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code)

and SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved public service facilities needed to provide expanded services in the City. However, even if a facility were required to service the increased population or employees resulting from cumulative development, the new facility would likely be developed on an infill parcel. Given the location of such a facility (in an infill area), environmental documents for construction or expansion are typically categorical exemptions or negative declarations and would not result in a significant physical environmental impact.

Regarding public schools, cumulative projects would be required to pay school impact fees, pursuant to Senate Bill 50, which would offset potential impacts of increased student enrollment on school facilities.

Therefore, the Project would not have a considerable contribution to any potential significant cumulative impact regarding public services and impacts. The impact would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.**

**Mitigation:** None required.

---

## 4.7.11.5 References

City of Oakland. 2007. *Land Use and Transportation Element of the Oakland General Plan*, March 24, 1998, amended to June 21, 2007. Available at https://www.oaklandca.gov/resources/land-use-and-transportation-element. Accessed February 10, 2022.

City of Oakland. 2012. *General Plan, Safety Element*. Adopted 2004; amended 2012. Accessed February 10, 2022. https://www.oaklandca.gov/resources/safety-element.

City of Oakland. 2019. *Downtown Oakland Specific Plan Draft Environmental Impact Report*. August 2019. Accessed February 10, 2022. https://www.oaklandca.gov/documents/draft-dosp-eir.

Oakland Police Department (OPD). 2021. Police District Locator. Available at http://gisapps1.mapoakland.com/policedistricts/. Accessed February 13, 2021.

---

# 4.7.12 Recreation

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XVI. RECREATION —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or | ☐ | ☐ | ☒ | ☐ |
| 2) Include recreational facilities or require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment. | ☐ | ☐ | ☒ | ☐ |

## 4.7.12.1 Environmental Setting

There are several public parks owned and managed by the Oakland Department of Parks, Recreation, and Youth Development in the vicinity of the Project site. Fruitvale Bridge Park is located across Alameda Avenue from the Project site adjacent to the Bay Trail. In addition, Josie de la Cruz Park (1637 Fruitvale Avenue) and Cesar Chavez Park (Foothill Boulevard and Bridge Avenue) are located approximately 0.62 and 0.72 miles from the Project site, respectively. The closest operating recreation center is the Carmen Flores Recreation Center located approximately 0.63 miles northeast of the Project site, adjacent to Josie de la Cruz Park. The closest athletic fields are located at Lazear Athletic Field (824 29th Avenue), approximately 0.3 miles northwest of the Project site, and include a Junior soccer field.

## 4.7.12.2 Regulatory Setting

### *City of Oakland General Plan*

The OSCAR Element of the Oakland General Plan contains the following principles relevant to the Project (City of Oakland, 1996):

> **Objective OS-2: Urban Parks, Schoolyards, and Gardens.** To maintain an urban park, schoolyard, and garden system which provides open space for outdoor recreation, psychological and physical well-being, and relief from the urban environment.
>
> > ***Policy OS-2.1: Protection of Park Open Space.*** Manage Oakland's urban parks to protect and enhance their open space character while accommodating a wide range of outdoor recreational activities.
>
> **Objective OS-7: Shoreline Access.** To increase physical and visual access to the Oakland shoreline and create new opportunities for shoreline recreation.
>
> > ***Policy OS-7.2: Dedication of Shoreline Public Access.*** Support the BCDC requirements which mandate that all new shoreline development designate the water's edge as publicly accessible open space where safety and security are not compromised, and where access can be achieved without interfering with waterfront industrial and maritime uses. Where such conflicts or hazards would result, support the provision of off-site access

improvements in lieu of on-site improvements. In such cases, the extent of off-site improvements should be related to the scale of the development being proposed.

***Policy OS-7.3: Waterfront Appreciation.*** Promote a greater appreciation of the Oakland waterfront by preserving and enhancing waterfront views, promoting its educational value, and, exploring new and creative ways to provide public access to the shoreline without interfering with transportation and shipping operations or endangering public safety.

### *Oakland Municipal Code*

Oakland Municipal Code, Chapter 15.74, Transportation and Capital Improvement Fees, establishes citywide transportation and capital improvements impact fees in the City of Oakland to assure that development projects pay their fair share to compensate for the increased demand for transportation and capital improvements infrastructure generated by development projects within the City. Funds deposited into the Capital Improvements Impact Fee Fund are used to pay for projects that are required for fire, police, library, parks and recreation, or storm drain services.

### *City of Oakland Parks and Homeless Services Measure (Measure Q)*

In March 2020, City of Oakland voters passed an ordinance that authorizes a 20-year special annual parcel tax to fund parks and recreational facilities, services for unhoused and unsheltered persons, and maintenance of stormwater trash collection systems. Approximately 64 percent of tax revenue could be used for parks, landscape maintenance, and recreational services, and no more than 55 percent can be used to preserve current parks and operational services. Non-residential parcels are taxed based on parcel frontages and square footage.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on recreation and that apply to the Project are listed below. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to recreation. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA PUB-1: Capital Improvements Impact Fee.** *(Standard Condition of Approval 73)*

**Requirement:** The project applicant shall comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code).

**SCA REC-1: Access to Parks and Open Space.** *(Standard Condition of Approval 74)*

**Requirement:** The project applicant shall submit a plan for City review and approval to enhance bicycle and pedestrian access from the project site and adjacent areas to Fruitvale Bridge Park. Examples of enhancements may include, but are not limited to, new or improved bikeways, bike parking, traffic control devices, sidewalks,

pathways, bulb-outs, and signage. The project sponsor shall install the approved enhancements during construction and prior to completion of the project.

### 4.7.12.3 Project Impacts and Discussion

**Impact REC-1: The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated or require the construction or expansion of recreational facilities which could have a substantial adverse physical effect on the environment. (Criteria 1 and 2) (*Less than Significant*)**

The Project would result in an estimated 350 new employees on the Project site (see Section 4.7.10, *Population and Housing*). The associated increase in the demand for existing parks and recreational facilities by employees and visitors to the Project site would not be substantial and would be typical of the demand associated with commercial development.

Furthermore, although not necessary to avoid substantial deterioration of existing recreational facilities, the Project would include several open spaces available to Project employees. Landscaped areas would be developed along the Fruitvale Avenue and Alameda Avenue frontages. The Project also proposes to increase public access to the estuary shoreline and the Bay Trail, by shifting Alameda Avenue approximately 100 feet inland and creating new and improved pedestrian sidewalks and bike facilities. These project components would be implemented in accordance with SCA REC-1, Access to Parks and Open Space, which requires the Project Applicants to submit a plan for City review and approval to enhance bicycle and pedestrian access from the Project site to the Bay Trail and Fruitvale Bridge Park across Alameda Avenue from the Project site.

In addition, the Project would also be subject to the Measure Q annual parcel tax to fund parks and recreational facilities, including landscape maintenance and preserving existing parks and operational services. The Project would generate a net increase in property taxes and other fees providing additional funds for the City's General Fund, which the City allocates in part to cover any increased operational costs associated with parks and recreation. Funds allocated to maintain recreational resources would address any increase in park use. Therefore, the Project would not increase the use of existing parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be substantially accelerated or require the construction or expansion of recreational facilities which could have a substantial adverse physical effect on the environment. The impact would be less than significant.

The Project would comply with the requirements of the City of Oakland Capital Improvements Fee Ordinance (chapter 15.74 of the Oakland Municipal Code) by incorporating City of Oakland SCA PUB-1, Capital Improvements Impact Fee, that would assist in funding new, expanded, or improved parks and recreation facilities needed to provide expanded services in the City. Park projects developed as a result of the City's Capital Improvements Fee, funded in part by the Project, or by other means, would be required to undergo environmental review as they are identified.

**SCA REC-1: Access to Parks and Open Space.**

**SCA PUB-1: Capital Improvements Impact Fee.** See Section 4.7.11.

**Mitigation:** None required.

---

## 4.7.12.4 Cumulative Impacts

**Impact REC-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in significant cumulative impacts to recreation. (*Less than Significant*)**

The geographic context for cumulative impacts to public services is citywide, as parks and recreation facilities are provided citywide. Cumulative development in the Project vicinity and citywide could generate a need for additional parks and recreation facilities. Cumulative projects would also be subject to the Measure Q annual parcel tax to fund parks and recreational facilities and would generate a net increase in property taxes and other fees providing additional funds for the City's General Fund to cover costs associated with increased operational costs associated with parks and recreation. Similar to the Project, cumulative projects would be subject to the requirements of the City of Oakland Capital Improvements Fee Ordinance (Chapter 15.74 of the Oakland Municipal Code) compliance with which is required through SCA PUB-1, that would assist in funding new, expanded, or improved parks and recreation facilities needed to provide expanded services in the City. Cumulative projects would be subject to the requirements or SCA REC-1, which requires project applicants to submit a plan for City review and approval to enhance bicycle and pedestrian access from the project sites to any existing adjacent open spaces such as parks, lakes, or the shoreline. Therefore, the Project would not have a considerable contribution to any potential significant cumulative impact with regard to parks and recreation facilities. The impact would be less than significant.

**SCA PUB-1: Capital Improvements Impact Fee.** See Section 4.7.11.

**SCA REC-1: Access to Parks and Open Space.**

**Mitigation:** None required.

---

## 4.7.12.5 References

City of Oakland. 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*. Adopted June 11, 1996.

---

# 4.7.13 Tribal Cultural Resources

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XVIII. TRIBAL CULTURAL RESOURCES —** Would the Project: | | | | |
| 1) 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 | ☐ | ☐ | ☒ | ☐ |
| 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. | ☐ | ☐ | ☒ | ☐ |

## 4.7.13.1 Cultural Resources

See Section 4.7.4, *Cultural Resources*, of this chapter for an analysis of potential Project impacts to cultural resources including historic architectural resources as well as historic and prehistoric archaeological resources including human remains.

## 4.7.13.2 Environmental Setting

A review of records from the Northwest Information Center of the California Historical Resources Information System indicates that there are no previously recorded prehistoric archaeological sites in the Project site (NWIC, 2021). The nearest prehistoric resources are located over 0.5 mile to the southwest and 2 miles to the southeast.

Historic maps show that Sausal (Diamond) Creek flowed along the west side of the Project site prior to the U.S. Army Corps of Engineers excavation of the present-day Tidal Canal and channelization of the creek (USGS, 1897, 1905, 1913; Sanborn, 1912).

The Project site is in an area mapped as Holocene-age Younger alluvial fan deposits (Graymer, 2000; Kleinfelder, 2021). This geologic formation has the potential to contain buried soil surfaces that may also harbor buried prehistoric archaeological resources (Meyer and Rosenthal, 2007). Geotechnical data indicates the Project site is underlain by interbedded clays, clayey silts and sands, sands, and gravels, and that artificial fill has been placed for building pads or pavement support. The fill is underlain by sandy and silty clays to depths of 9 to 14 feet below ground surface. Groundwater has been encountered at the Project site from 8 to 15 feet bgs (Kleinfelder, 2021).

While the general geologic context suggests prehistoric buried site sensitivity, the extensive historic-era development of the Project site further indicates that the potential to encounter prehistoric archaeological resources during Project implementation is relatively low.

### *Tribal Cultural Resources*

Pursuant to CEQA requirement in SB18/AB52, on March 16, 2022, the City sent letters to 11 Native American tribal representatives provided by the Native American Heritage Commission (NAHC) as potentially interested in projects in the City of Oakland. The letters provided a description of the Project, a map showing the Project location, and an invitation to respond to a request for consultation within 30 days (as required by PRC Section 21080.3.1.d). One response was received from the Confederated Villages of Lisjan on March 28, 2022. The tribe thanked the City for their notice and officially declined to participate in scoping or consultation for the Project. No other responses were received.

## 4.7.13.3 Regulatory Setting

### *Native American Heritage Commission*

The Native American Heritage Commission (NAHC) was created by statute in 1976, is a nine-member body appointed by the Governor to identify and catalog cultural resources (i.e., places of special religious or social significance to Native Americans and known graves and cemeteries of Native Americans on private lands) in California. The NAHC is responsible for preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintaining an inventory of Native American sacred sites located on public lands, and reviewing current administrative and statutory protections related to these sacred sites.

### *California Public Resources Code Sections 5097.98 and 5097.99*

PRC Section 5097.98 (reiterated in CEQA Guidelines Section 15064.5(e)) identifies steps to follow in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery. PRC Section 5097.99 prohibits obtaining or possessing any Native American artifacts or human remains that are taken from a Native American grave or cairn (stone burial mound).

### *California Health and Safety Code Section 7050.5*

California Health and Safety Code Section 7050.5 protects human remains by prohibiting the disinterment, disturbance, or removal of human remains from any location other than a dedicated cemetery.

### *California Public Resources Code and Tribal Cultural Resources*

In 2014, the California Legislature enacted Assembly Bill (AB) 52, which added provisions to the Public Resources Code regarding the evaluation of impacts on tribal cultural resources under CEQA, and requirements to consult with California Native American tribes. In particular, AB 52

requires lead agencies to analyze project impacts on tribal cultural resources separately from archaeological resources (PRC Sections 21074 and 21083.09). AB 52 defines "tribal cultural resources" in PRC Section 21074 and requires lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Sections 21080.3.1, 21080.3.2, and 21082.3).

A *tribal cultural resource* is defined in PRC Section 21074 as either a site, feature, place, or 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:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying the criteria set forth in PRC Section 5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.

### *General Plan Historic Preservation Element*

In March 1994, the Oakland City Council adopted the Historic Preservation Element of the Oakland General Plan (amended July 21, 1998). The following goal and policies address cultural resources and are relevant to the Project (City of Oakland, 1998):

> **Goal 2:** To preserve, protect, enhance, perpetuate, use, and prevent the unnecessary destruction or impairment of properties or physical features of special character or special historic, cultural, educational, architectural or aesthetic interest or value.
>
> Such properties or physical features include buildings, building components, structures, objects, districts, sites, natural features related to human presence, and activities taking place on or within such properties or physical features.
>
> > ***Policy 4.1: Archaeological resources.*** To protect significant archaeological resources, the City will take special measures for discretionary projects involving ground disturbances located in archaeologically sensitive areas.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to reducing impacts on tribal cultural resources and that apply to the Project are SCA CUL-1, Archaeological and Paleontological Resources – Discovery During Construction; and SCA CUL-2, Human Remains – Discovery During Construction (see Section 4.7.4, *Cultural Resources*). If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to cultural resources. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

### 4.7.13.4 Project Impacts and Discussion

**Impact TRI-1: The Project would not cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074. (Criterion 1) (*Less than Significant with SCAs*)**

There are no tribal cultural resources listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k), nor has the City of Oakland determined a resource to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. Based on background research and the environmental context, the Project site has a low potential to uncover previously undiscovered prehistoric archaeological resources, including those that could be considered tribal cultural resources.

While unlikely, the inadvertent discovery of prehistoric archaeological resources that could be considered tribal cultural resources would be a potentially significant impact. However, implementation of SCA CUL-1 and SCA CUL-2 would reduce impacts to archaeological resources and human remains, including those considered tribal cultural resources, by requiring that work halt in the vicinity of a find until it is evaluated by a qualified archaeologist and a Native American representative. Implementation of SCA CUL-1 and SCA CUL-2 would ensure that appropriate procedures are followed, and the impact would be reduced to a less-than-significant level.

> **SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** See Section 4.7.4.
>
> **SCA CUL-2: Human Remains – Discovery During Construction.** See Section 4.7.4.
>
> **Mitigation:** None required.

---

### 4.7.13.5 Cumulative Impacts

**Impact TRI-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not contribute to cumulative adverse impacts on archaeological resources, human remains, and tribal cultural resources. (*Less than Significant with SCAs*)**

The geographic scope for cumulative effects on tribal cultural resources includes the immediate vicinity of locations where the Project could cause disturbance to these resources. Similar to the Project, cumulative projects in the vicinity could have a significant impact on previously undiscovered archaeological resources, including human remains interred outside of formal cemeteries, during ground-disturbing activities. These resources could also be considered tribal cultural resources. The potential impacts of the Project when considered together with similar impacts from other probable future projects in the vicinity could result in a significant cumulative impact on tribal cultural resources. However, implementation of SCA CUL-1 and SCA CUL-2 would require that work halt in the vicinity of a find until it is evaluated by a qualified archaeologist, and in the case of human remains the Alameda County Coroner. In addition,

cumulative projects undergoing CEQA review would also include these SCAs. In addition, cumulative projects would be required to comply with Public Resources Code Section 21080.3(b) (Assembly Bill 52) and send notification letters to culturally-affiliated Native American tribes. Therefore, with implementation of SCA CUL-1 and SCA CUL-2, the Project's contribution to cumulative impacts would not be considerable, and the impact would be less than significant.

> **SCA CUL-1: Archaeological and Paleontological Resources – Discovery During Construction.** See Section 4.7.4.
>
> **SCA CUL-2: Human Remains – Discovery During Construction.** See Section 4.7.4.
>
> **Mitigation:** None required.

---

## 4.7.13.6 References

Graymer, R.W. 2000. *Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California*. U.S. Geological Survey Miscellaneous Field Studies Map MF-2342. Scale 1:50,000.

Kleinfelder. 2021. *Geotechnical Investigation Report, Industrial Warehouse Site; 3600 Alameda Avenue, Oakland, California*. Project No. 20214267.001A. Northwest Information Center. Records search results (File No. 19-0876). On file, ESA. November 21, 2019; May 26, 2021.

Meyer, Jack, and Jeffrey Rosenthal. 2007. *Geoarchaeological Overview of the Nine Bay Area Counties in Caltrans District 4.* Prepared for California Department of Transportation, District 4.

Northwest Information Center (NWIC) of the California Historical Resources Information System. 2022. Database Search File No. 21-1575. Results on file at ESA. April 12, 2022.

U.S. Geological Survey (USGS). 1897. Concord, 1:62,500 Topographic Quadrangle Map, 1897.

USGS. 1915. Concord, 1:62,500 Topographic Quadrangle Map, 1915.

---

# 4.7.14 Utilities and Service Systems

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XIX. UTILITIES AND SERVICE SYSTEMS —** The Project would have a significant impact on the environment if it would: | | | | |
| 1) Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board; | ☐ | ☐ | ☒ | ☐ |
| 2) Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects; | ☐ | ☐ | ☒ | ☐ |
| 3) Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects; | ☐ | ☐ | ☒ | ☐ |
| 4) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects; | ☐ | ☐ | ☒ | ☐ |
| 5) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects; | ☐ | ☐ | ☒ | ☐ |
| 6) Violate applicable federal, state, and local statutes and regulations related to solid waste; | ☐ | ☐ | ☒ | ☐ |

## 4.7.14.1 Environmental Setting

### *Wastewater*

East Bay Municipal Utilities District (EBMUD) provides sanitary sewer treatment services to the City of Oakland. Capacity for the EBMUD system is provided by: (1) the interceptor system, (2) pump stations, and (3) Wet Weather Facilities (WWFs). WWFs provide a way to convey flows through EBMUD's system during system overload from stormwater entering the wastewater conveyance system requiring discharging wastewater into the East Bay. EBMUD's main wastewater treatment plant (MWWTP) is located southwest of the I-580/I-80 interchange in Oakland. Wastewater is collected by 29 miles of interceptor lines that move wastewater from local sewer collection systems to the MWWTP. Currently, the MWWTP is designed to provide primary treatment for a flow of up to 320 mgd and secondary treatment for a maximum flow of 168 mgd. The average daily dry weather flow (ADWF) is 63 mgd. The treated effluent is disinfected and dechlorinated before being discharged into San Francisco Bay, approximately one mile off the East Bay shore (EBMUD, 2022).

### *Stormwater*

The City of Oakland is part of the Alameda County Flood Control District (ACFCD) Zone 12. The storm drainage system in the City consists of more than 300 miles of storm drainpipes, over 100 miles of open creeks, and 15,000 structures (mostly inlets, manholes, and catch basins). City-owned storm drainage facilities are typically located within easements and rights-of-way. Privately owned facilities in the City's jurisdiction typically occur within private properties and include above-ground drainage systems, creeks, and watercourses. Most of the privately owned facilities are not maintained by the City. City-maintained drainage facilities include structures that are constructed through the permit process and dedicated to the City for maintenance.

### *Water Supply*

EBMUD is a publicly owned utility that owns, operates, and maintains the water distribution system within the City of Oakland. The 2020 Urban Water Management Plan (UWMP), adopted on June 22, 2021 by EBMUD's Board of Directors under Resolution No. 35234-21, is a long-range planning document used to assess current and projected water usage, water supply planning, and conservation and recycling efforts (EBMUD, 2021).

### *Solid Waste*

Non-hazardous waste in the City of Oakland is collected by Waste Management of Alameda County (WMAC), which provides curbside pickup for residential, commercial, and industrial non-hazardous waste, and transports it to WMAC's Davis Street Transfer Station in San Leandro. Transfer trucks haul most of the waste to the Altamont Landfill and Resource Facility, located approximately 35 miles east of Oakland near Livermore. The permitted capacity at Altamont is 87 million cubic yards, and 11,150 tons per day. As of 2018, the estimated remaining refuse capacity for the Altamont Landfill was 65.4 million cubic yards (60 million tons). At the average rate of fill from 2014-2018 and adjusting for projections for waste declines through 2023 (held steady after 2023 due to uncertainty), the facility has more than 30 years of capacity remaining and an estimated closure date of 2049. The ACWMA has also acquired land in the Altamont Hills area suitable for development of a public multi-purpose waste management facility. Depending upon need, the facility could include various diversion facilities in conjunction with a landfill with sufficient capacity to provide additional reserve disposal capacity. The chosen site contains 98 million cubic yards of landfill capacity (ACWMA, 2020).

## 4.7.14.2 Regulatory Setting

### *Wastewater and Stormwater Drainage*

See Section 4.7.7, *Hydrology and Water Quality*, for a description of the City of Oakland's NPDES permits and other water quality regulations.

### *AB 939*

AB 939, enacted in 1989, requires Source Reduction and Recycling Element of each city and county to include an implementation schedule to divert a percentage of its solid waste from landfill disposal through source reduction, recycling, and composting activities. AB 939 specifies

a required diversion rate of at least 50 percent of wastes by the year 2000. The California Department of Resources Recycling and Recovery (CalRecycle) indicates that the City of Oakland's diversion rate was 59 percent in 2006. Beginning with the 2007 jurisdiction annual reports, diversion rates were no longer measured. With the passage of Senate Bill (SB)1016 in 2006, the Per Capita Disposal Measurement System, only per capita disposal rates are measured to determine if a jurisdiction's efforts are meeting the intent of AB 939. In 2020, the City reported a waste disposal rate of 7.70 pounds/person/day for employees, meeting its per employee disposal target rate of 15.3 pounds/person/day (CalRecycle, 2021).

### *City of Oakland General Plan*

The *Open Space, Conservation, and Recreation Element* and *Public Safety Element* of the Oakland General Plan describe the following policies regarding drainage, adopted for the purpose of avoiding or mitigating an environmental effect, and that apply to the Project (City of Oakland, 1996).

> ***Policy CO-5.3:*** Employ a broad range of strategies, compatible with the Alameda Countywide Clean Water Project to: (a) reduce water pollution associated with stormwater runoff; (b) reduced water pollution associated with hazardous spills, runoff from hazardous material areas, improper disposal of household hazardous wastes, illicit dumping, and marina "live-aboards;" and (c) improve water quality in Lake Merritt to enhance the lake's aesthetic, recreational, and ecological functions.
>
> ***Policy FL-1:*** Enforce and update local ordinances, and comply with regional orders, that would reduce the risk of storm-induced flooding.
>
> ***Policy FL-2*:** Continue or strengthen City programs that seek to minimize the storm-induced flooding hazard.
>
> ***Policy FL-3*:** Seek the cooperation and assistance of other government agencies in managing the risk of storm-induced flooding.

### *Oakland Municipal Code*

#### Title 15, Buildings and Construction, Chapter 15.34 - Construction and Demolition (C&D) Ordinance

The City of Oakland's C&D Ordinance is intended to further the goals of AB 939. Building permit applicants must complete a Waste Reduction and Recycling Plan as part of the Building Permit Application process to detail the plan for salvaging and recycling C&D debris generated during Project construction. Standards call for salvage and/or recycling 100 percent of asphalt and concrete, and at least 65 percent of all remaining debris.

#### Title 17, Planning Code, Chapter 17.118 – Recycling Space Allocation Ordinance

Project applicants are required to submit project drawings for construction-related permits that contain recycling collection and storage areas in compliance with this ordinance. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of 10 cubic feet.

### *City of Oakland Standard Conditions of Approval and Uniformly Applied Development Standards Imposed as Standard Conditions of Approval*

The City's SCAs relevant to utilities and service systems and that apply to the Project are listed below, some of which reduce potential impacts. If the Project is approved by the City, all applicable SCAs would be adopted as enforceable conditions of approval and required, as applicable, to be implemented during construction and operation of the Project to help ensure less-than-significant impacts to utilities. Because the conditions of approval are incorporated as part of Project, they are not listed as mitigation measures.

**SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.** *(Standard Condition of Approval 82)*

**Requirement:** The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center.

**SCA UTIL-2: Recycling Collection and Storage Space** *(Standard Condition of Approval 84)*

**Requirement:** The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two (2) cubic feet of storage and collection space per residential unit is required, with a minimum of ten (10) cubic feet. For nonresidential projects, at least two (2) cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten (10) cubic feet.

**SCA UTIL-3: Green Building Requirements** *(Standard Condition of Approval 85)*

***a. Compliance with Green Building Requirements During Plan-Check***

**Requirement:** The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code).

i. The following information shall be submitted to the City for review and approval with the application for a building permit:

- Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards.

- Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit.
- Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit.
- Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below.
- Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance.
- Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit.
- Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

ii. The set of plans in subsection (i) shall demonstrate compliance with the following:

- CALGreen mandatory measures.
- At least LEED Silver per the appropriate checklist approved during the Planning entitlement process.
- All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted.
- The required green building point minimums in the appropriate credit categories.

***b. Compliance with Green Building Requirements During Construction***

**Requirement:** The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project.

The following information shall be submitted to the City for review and approval:

i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit.

ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance.

iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

*c. Compliance with Green Building Requirements After Construction*

**Requirement:** Prior to the finalizing the Building Permit, the Green Building Certifier shall submit the appropriate documentation to City staff and attain the minimum required point level.

**SCA UTIL-4: Sanitary Sewer System** *(Standard Condition of Approval 87)*

**Requirement:** The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system.

**SCA UTIL-5: Storm Drain System** *(Standard Condition of Approval 88)*

**Requirement:** The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition.

**SCA: Underground Utilities.** *(Standard Condition of Approval 83)*

**Requirement:** The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities.

## 4.7.14.3 Project Impacts and Discussion

**Impact UTIL-1: The Project would not result in exceedance of EBMUD's wastewater discharge limitations or exceed the capacity of the existing wastewater treatment system, and would not result in a significant environmental effect related to the construction of new wastewater treatment facilities or expansion of existing facilities. (Criteria 1 and 4) (*Less than Significant with SCAs*)**

The Project would construct new water and sewer laterals that would connect to existing water and sewer lines in Alameda Avenue. Construction activity in Alameda Avenue would be coordinated with EBMUD to ensure the integrity of the existing utility lines is maintained throughout the construction period. Although not anticipated, any required relocation of existing utility lines would also be coordinated with EBMUD. Construction activities associated with all new and relocated utility lines are subject to the federal and state laws listed in Tables 4.4-1 and 4.4-2 in Section 4.4, *Hazards and Hazardous Materials*. Project applicants must submit

documentation of remediation plans and remediation completion to EBMUD for review to ensure all new and relocated utility lines are placed in clean soil corridors.

Currently, wastewater generation is zero since the existing condition of the Project site is vacant. The Project would result in an increase in wastewater discharge to the EBMUD MWWTP system compared to current conditions, based on an increase in employment and Project operations on the Project site. However, the Project would not change stormwater flows substantially due to the existing developed nature of the Project area, and the additional wastewater generated by the Project would be adequately handled by the existing sanitary sewer system. Implementation of SCA UTIL-4, Sanitary Sewer System, would require that the Project Applicant prepare a Sanitary Sewer Impact Analysis that includes an estimate of pre-Project and post-Project wastewater flow from the Project site. In the event that the Sanitary Sewer Impact Analysis indicates that the net increase in Project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the Project Applicant would be required to pay a Sanitary Sewer Impact Fee for funding improvements to the sanitary sewer system. The Project would also be required to implement SCA UTIL-3, Green Building Requirements, which would reduce the generation of wastewater through required standards for plumbing fixtures and fittings. Therefore, with implementation of SCAs, the Project would not exceed EBMUD's wastewater discharge limitations or the capacity of the existing wastewater conveyance or treatment system and impacts would be less than significant.

Construction of utility connections and laterals are included in Project construction estimates, analyzed within this Draft EIR, and individually would not cause significant environmental effects. Therefore, the Project would not result in a significant environmental effect related to the construction of new wastewater treatment facilities or expansion of existing facilities. This impact would be less than significant.

**SCA UTIL-3: Green Building Requirements.**

**SCA UTIL-54 Sanitary Sewer System.**

**Mitigation:** None required.

---

**Impact UTIL-2: The Project would not require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects. (Criterion 2) (*Less than Significant with SCAs*)**

Overall, the Project would result in a reduction of impervious area on the Project site from approximately 1,153,905 square feet to 912,075 square feet. The Project would result in 241,830 square feet of post-Project pervious area. Thus, the impervious area post-Project would not exceed the amount of existing/pre-Project impervious area. SCA UTIL-5, Storm Drain System, would be applicable to the Project and requires that the Project storm drainage system be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines, and that peak stormwater runoff from the Project site be reduced by at least 25 percent compared to the pre-Project condition to the maximum extent practicable. Stormwater would be collected and

treated on-site and routed to an existing storm drain line in Alameda Avenue. The Project would result in new impervious surfaces, and associated stormwater treatment requirements would apply to the entire site. Stormwater management-related site design measures would include directing roof runoff; runoff from sidewalks, walkways, and/or patios; and runoff from driveways and/or uncovered parking lots onto vegetated stormwater swales. These swales would be designed with or without percolation as directed by ACDEH (see Impact HAZ-1 in Section 4.4, *Hazards and Hazardous Materials* for a discussion of hazardous materials and regulatory oversight). The Project would implement source control measures to minimize sources of runoff pollution including measures to minimize run-on to and run-off from the loading area.

Construction of utility connections and laterals, including potential impacts related to hazardous materials, are included in Project construction estimates, are analyzed within this Draft EIR and would not individually cause significant environmental effects. In addition, implementation of SCA HYD-1, State Construction General Permit; and SCA HYD-2, NPDES C.3 Stormwater Requirements for Regulated Projects would ensure potential impacts from stormwater runoff velocities and volumes would be controlled during and after construction (see Section 4.7.7, *Hydrology and Water Quality*). Therefore, the Project would not result in a significant environmental effect related to the construction of new storm water drainage facilities or expansion of existing facilities. This impact would be less than significant.

**SCA UTIL-5: Storm Drain System.**

**SCA HYD-1: Construction General Permit.** See Section 4.7.7.

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 4.7.7.

**Mitigation:** None required.

---

**Impact UTIL-3: The Project would not exceed water supplies available to serve the Project from existing entitlements and resources and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects. (Criterion 3) (*Less than Significant*)**

The Project would result in an increase in water use compared to current conditions on the vacant site. However, the Project would not substantially increase water use due to the existing developed nature of the Project area. The water demand for the Project is accounted for in EBMUD's water demand projections, as published in EBMUD's 2020 UWMP. EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand-attributed changes in development patterns (EBMUD, 2020). The Project would also be required to implement SCA UTIL-3, Green Building Requirements, which would reduce the use of water on-site through required standards for plumbing fixtures and fittings.

The Project would construct new water and sewer laterals that would connect to existing water and sewer lines in Alameda Avenue. However, as the Project is located in an already built out

urban area, no new major water supply infrastructure would be required. Construction of utility connections and laterals are included in Project construction estimates, are analyzed within this Draft EIR, and would not individually cause significant environmental effects. Therefore, the Project would not result in a significant environmental effect related to the construction of new water supply facilities or expansion of existing facilities. This impact would be less than significant.

**SCA UTIL-3: Green Building Requirements.**

**Mitigation:** None required.

---

**Impact UTIL-4: The Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs and would not require or result in construction of landfill facilities or expansion of existing facilities, and would not violate applicable federal, State, and local statutes or regulations related to solid waste. (Criteria 5 and 6) (*Less than Significant*)**

### Construction

The project site would be served by the Altamont Landfill described in Section 4.7.14.1, *Environmental Setting*, which has the capacity to handle solid wastes generated by the demolition and construction phases of the Project. The Project Applicant would be required to comply with the City's construction and demolition debris recycling ordinance (Municipal Code Chapter 15.34), which requires submittal of a plan to divert at least 50 percent of the construction waste generated by the Project from landfill disposal. The California Green Building Standards Code (CALGreen) also requires recycling and/or salvaging for reuse of a minimum of 65 percent of non-hazardous construction and demolition waste as a mandatory measure. SCA UTIL-3, Green Building Requirements would ensure implementation of all mandatory CALGreen measures. In addition, implementation of SCA UTIL-1, Construction and Demolition Waste Reduction and Recycling, would ensure that solid waste during construction is minimized. Therefore, construction of the Project would result in less-than-significant impacts with respect to solid waste.

### Operation

Based on the City's 2020 waste disposal rate of 7.70 pounds/person/day for employees and the estimated 350 employees generated by the Project (see Section 4.7.10, *Population and Housing*), the Project would generate approximately 983,675 pounds of solid waste per year (491 tons or approximately 1.35 tons per day). As discussed in Section 4.7.14.1, *Environmental Setting*, the ACWMA has enough capacity to serve the Project solid waste stream projected until the projected closure of the Altamont Landfill around 2049 (ACWMA, 2020). The Project's estimated annual solid waste generation would represent approximately 0.021 percent of the Altamont Landfill's current daily permitted capacity. Additionally, the ACWMA has acquired land in the Altamont Hills area suitable for development of a public multi-purpose waste management facility containing 98 million cubic yards of landfill capacity, enough to serve the Project for the foreseeable future (ACWMA, 2020). Therefore, the Project would be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal

needs and would not require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects, and impacts would be less than significant.

SCA UTIL-2, Recycling Collection and Storage Space, is applicable to the Project and would require compliance with the Recycling Space Allocation Ordinance (OMC Chapter 17.118). The Ordinance requires the Project Applicant to submit a plan that shows adequate space and access to recycling collection and storage areas, in addition to capacity calculations, and specify the methods by which the development will meet the City's current solid waste diversion requirements. The required plan would be implemented and maintained for the lifetime of the Project, including any future updated requirements by the City. Any incentive programs would be required to remain fully operational as long as businesses exist at the Project site.

The Project Applicant would be required to comply with existing policies and regulations, including the City of Oakland's CALGreen Building requirements, and the Project would not cause the City to violate other applicable federal, state, and local statutes and regulations related to solid waste. The impact would be less than significant.

**SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.**

**SCA UTIL-2: Recycling Collection and Storage Space.**

**SCA UTIL-3: Green Building Requirements.**

**Mitigation:** None required.

---

## 4.7.14.4 Cumulative Impacts

**Impact UTIL-1.CU: The Project, combined with cumulative development in the Project vicinity and citywide, would not result in or contribute to a significant cumulative impact on the capacity of EBMUD's wastewater systems or the City's stormwater drainage system; water supplies; or generation of solid waste. (*Less than Significant with SCAs*)**

The geographic scope for cumulative impacts on wastewater treatment and water supply is EBMUD's service area, which includes all development considered in the 2020 UWMP, as described previously. The cumulative context for stormwater facilities includes the cumulative development within the City's stormwater drainage collection area that includes the Project site. The geographic scope for cumulative impacts on solid waste capacity is Alameda County, which is governed by the ACWMA.

### Wastewater

The Project, in combination with past, present, and reasonably foreseeable future development in EBMUD's service area would result in an increase in wastewater generation. However, SCA UTIL-4, Sanitary Sewer System, requires that Project applicants prepare a Sanitary Sewer Impact Analysis that includes an estimate of pre-Project and post-Project wastewater flow from the

Project site. In the event that the Sanitary Sewer Impact Analysis indicates that the net increase in Project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the Project Applicant would be required to pay a Sanitary Sewer Impact Fee for funding improvements to the sanitary sewer system. With implementation of SCA UTIL-3 and UTIL-5, the Project would not exceed EBMUD's wastewater discharge limitations or the capacity of the existing wastewater conveyance or treatment system, and the Project would not contribute considerably to any potential significant cumulative impact to wastewater.

### Stormwater

The Project, in combination with past, present, and reasonably foreseeable future development in the Project's stormwater drainage collection area could result in the need for the construction of new storm water drainage facilities or expansion of existing facilities due to the City's aging stormwater collection system. The potential construction or expansion of stormwater drainage infrastructure would be installed primarily in existing roadways and utility rights-of-way, and would be subject to the City's SCAs, which would reduce potential impacts to a less than significant level. The Project would include its own stormwater site design measures, the construction of which is analyzed throughout this Draft EIR. Therefore, the Project would not contribute considerably to any potential significant cumulative impact in this regard.

### Water Supply

The Project, in combination with past, present, and reasonably foreseeable future development in EBMUD's service area would result in an increase in water supply demand. As described above, EBMUD's water demand projections account for anticipated future water demands within EBMUD's service boundaries and for variations in demand-attributed changes in development patterns (EBMUD, 2020). In addition, cumulative projects would be subject to SCA UTIL-3, Green Building Requirements, which would reduce the use of water through required standards for plumbing fixtures and fittings. The Project would not exceed water supplies available to serve the Project. Therefore, the Project would not contribute considerably to any potential significant cumulative impacts related to water supply.

### Solid Waste

The Project, in combination with past, present, and reasonably foreseeable future development in Alameda County governed by the ACWMA would result in an increase in solid waste generation collected and deposited in the Altamont Landfill. As described above, as of 2018, the Altamont Landfill had an estimated remaining refuse capacity of approximately 75 percent and an estimated closure date of 2049. In addition, the ACWMA has acquired land in the Altamont Hills area suitable for development of a public multi-purpose waste management facility with 98 million cubic yards of landfill capacity. Cumulative development would be subject to the same City SCAs designed to reduce solid waste. Based on the existing landfill capacities and closure date, along with ACWMA projections, planning, and waste reductions within the service area of the ACWMA, and compliance with City of Oakland waste reduction ordinances and green building requirements, including SCAs UTIL-1, UTIL-3, and UTIL-4 required for the Project, cumulative impacts related to landfill capacity would be less than significant.

**SCA UTIL-1: Construction and Demolition Waste Reduction and Recycling.**

**SCA UTIL-2: Recycling Collection and Storage Space.**

**SCA UTIL-3: Green Building Requirements.**

**SCA UTIL-4: Sanitary Sewer System.**

**SCA UTIL-5: Storm Drain System.**

**SCA HYD-1: Construction General Permit.** See Section 4.7.7.

**SCA HYD-2: NPDES C.3 Stormwater Requirements for Regulated Projects.** See Section 4.7.7.

**Mitigation:** None required.

---

## 4.7.14.5 References

Alameda County Waste Management Authority (ACWMA). 2020. *Integrated Waste Management Plan Countywide Element, Countywide Siting Element, Countywide Summary Plan*. Adopted April 22, 2020; amended October 28, 2020. Accessed April 26, 2022. https://www.stopwaste.org/sites/default/files/CoIWMP-Final-20201215.1.pdf.

California Department of Resources Recycling and Recovery (CalRecycle). 2022. Jurisdiction Diversion/Disposal Rate Summary. Accessed April 26, 2022. https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006.

City of Oakland. 1996. *Open Space, Conservation, and Recreation Element (OSCAR) Element of the General Plan*. Adopted June 11, 1996.

East Bay Municipal Utilities District (EBMUD). 2022. Wastewater Treatment. Accessed April 26, 2022. https://www.ebmud.com/wastewater/collection-treatment/wastewater-treatment.

EBMUD. 2021. *Urban Water Management Plan 2020, East Bay Municipal Utility District*. Adopted June 22, 2021. Accessed April 26, 2022. https://www.ebmud.com/water/about-your-water/water-supply/urban-water-management-plan.

---

# 4.7.15 Wildfire

| *Issues (and Supporting Information Sources):* | *Potentially Significant Impact* | *Less Than Significant with Mitigation Incorporated* | *Less Than Significant Impact* | *No Impact* |
|---|---|---|---|---|
| **XX. WILDFIRE** — If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the Project would have a significant impact on the environment if it would: | | | | |
| 1) Substantially impair an adopted emergency response plan or emergency evacuation plan; | ☐ | ☐ | ☐ | ☒ |
| 2) 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; | ☐ | ☐ | ☐ | ☒ |
| 3) 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; or | ☐ | ☐ | ☐ | ☒ |
| 4) 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. | ☐ | ☐ | ☐ | ☒ |

## 4.7.15.1 Environmental Setting

The Project site is not located in or near a State Responsibility Areas (SRA) or lands classified as very high fire hazard severity zones by the California Department of Forestry and Fire Protection (CAL FIRE) (CAL FIRE, 2007; CAL FIRE, 2008). The Project site is also not located within the boundaries of an area that is considered to be a Wildland-Urban Interface (WUI) of a fire-threatened community (ABAG and MTC, 2020). Within the City of Oakland, SRAs, very high fire hazard severity zones, and WUI zones are located primarily in the Oakland hills. The Project site is not located within the boundaries of the fire prevention and assessment district boundary identified in the Safety Element of the City's General Plan or the now-defunct Wildfire Prevention Assessment District boundary located within the geographic confines of the Oakland Hills, designated by CAL FIRE as a very high fire hazard severity zone (City of Oakland, 2012; WPAD, 2017).

As mentioned in Section 4.4, *Hazards and Hazardous Materials*, the Oakland Office of Emergency Services (OES) has identified a network of evacuation routes in the General Plan Safety Element (City of Oakland, City of Oakland General Plan Safety Element, 2012). Emergency Evacuation Routes are typically along major thoroughfares. Nearby Emergency Evacuation Routes include the north-south Fruitvale Avenue along the west side of the Project site and east-west San Leandro Street about three blocks north of the Project site.

## 4.7.15.2 Topics Considered and No Impact Determined

Factors that contribute to the risk of wildland fire include dense and fire-prone vegetation, poor access to firefighting equipment because of slopes or inadequate roads, and lack of adequate water pressure and service in fire-prone locations. The Project site is currently developed within a

highly urbanized area of the flat lands of Oakland by the Tidal Canal, that does not contain dense vegetation, and is surrounded by other developed properties and roadways. Wildfire was added in the update to the State CEQA Guidelines as an environmental topic for consideration with regard to impacts that could occur in areas in or near SRAs or lands classified as very high fire hazard severity zones. As discussed in Section 4.7.15.1, *Environmental Setting*, the Project site is not located in or near an SRA or lands classified as very high fire severity zones. Therefore, no impact would occur with regard to wildfire.

### 4.7.15.3 Cumulative Impacts

Because the Project would have no impact with regard to wildfire, it would not cause or contribute to any potential cumulative impact to such resources.

### 4.7.15.4 References

Association of Bay Area Governments and Metropolitan Transportation Commission (ABAG and MTC). 2020. *Wildland-Urban Interface fire threat for the San Francisco Bay Region. Source data produced by the California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP).* Updated August 27, 2020. Accessed June 8, 2022. https://mtc.maps.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=d45bf08448354073a26675776f2d09cb.

California Department of Forestry and Fire Protection (CAL FIRE). 2007. *Fire Hazard Severity Zones in SRA.* November 7, 2007. Accessed June 8, 2022. https://osfm.fire.ca.gov/media/7271/fhszs_map1.pdf.

CAL FIRE. 2008. *Oakland Very High Fire Hazard Zones in LRA, As Recommended by CAL FIRE*. September 3, 2008. Accessed June 8, 2022. https://osfm.fire.ca.gov/media/5606/oakland.pdf.

City of Oakland. 2012. *Safety Element of the General Plan*. Adopted March 20, 2012. Accessed June 8, 2022. https://oaklandca.s3.us-west-1.amazonaws.com/oakca1/groups/ceda/documents/webcontent/oak035217.pdf.

City of Oakland Wildfire Prevention Assessment District (WPAD). 2017. *Final Report on the Wildfire Prevention Assessment District.* City of Oakland, Public Safety Committee, and Oakland City Council. June 2017. Accessed June 8, 2022. https://oaklandca.s3.us-west-1.amazonaws.com/w/OAK063154.pdf.

# CHAPTER 5
# Project Variant

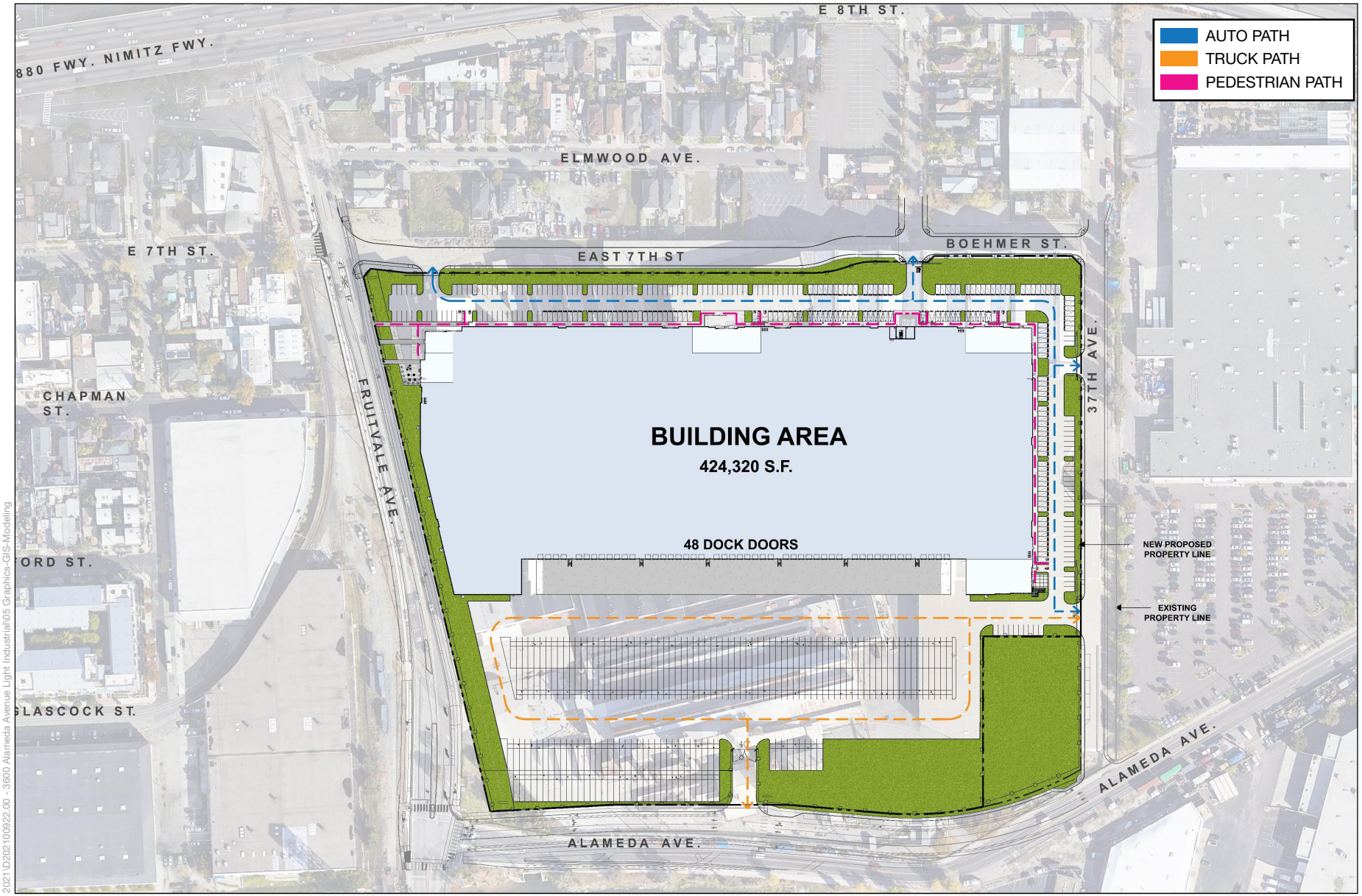
This Draft EIR analyzes a potential future east-west network connection as a variant to the Project that may or may not be included as part of the Project because the implementation is beyond the control of the Project Applicant at this time. This project component is included as a variant so that it can be incorporated into the Project in the event the necessary land can be acquired, and the necessary approvals can be obtained. There is no way to determine at this time whether the variant is feasible and can be implemented. The variant is not an "alternative" within the meaning of CEQA, however, in that it addresses a specific element of the Project and is not an alternative to the Project as a whole.

This Project Variant is considered with all Project components. All City of Oakland Standard Conditions of Approval (SCAs) and Mitigation Measures identified for the Project in Chapter 4 would apply to the Project combined with the East 7th Street Extension Project Variant.

## 5.1 East 7th Street Extension

As introduced in Chapter 3, *Project Description*, the Project Applicant is proposing to dedicate rights-of-way to the City along the north side of the Project site. Under the Project Variant, the City would accept the dedication and implement the extension of East 7th Street. The City would not accept the right-of-way dedication until such time in the future that it is determined that the extension is feasible and funding is available for implementation. Instead of a driveway-only connection from the Project site to Fruitvale Avenue, the Project Variant would extend East 7th Street by creating a new public right-of-way from its current terminus at Fruitvale Avenue east to 36th Avenue where it would connect with Boehmer Street (see **Figure 5-1**). This extension along with the Project would connect Fruitvale Avenue through to 37th Avenue along the entire north side of the Project site and result in a complete network connection surrounding the Project site. This change to the street network was envisioned in the CEAP *Policy Connection C* that calls for a central connector between Fruitvale Avenue and 37th Avenue.[1]

[1] Note the CEAP Policy Connection C calls for a connection from the eastern end of Ford Street to the southwestern end of 37th Avenue. The connection would require right-of-way acquisition, which would run through the Project site. The alternate location along East 7th Street would achieve the Policy Connection goal of providing "a central connector between Fruitvale Avenue and 37th Avenue from which new development could be accessed if large-scale properties in the area were to develop in the future."




2021\D202100922.00 - 3600 Alameda Avenue Light Industrial\05 Graphics-GIS-Modeling

SOURCE: HPA Architecture, 2023

3600 Alameda Industrial Project

**Figure 5-1**
Project Variant

ESA

The proposed street would be a 30-foot curb-to-curb street with minimum 5.5-foot sidewalks on both sides and would accommodate one travel lane and one parking lane in each direction. The Fruitvale Avenue/East 7th Street intersection would also be signalized, which would trigger required upgrades to the Union Pacific Railroad (UPRR) line at that intersection. At the time this Draft EIR is published, it is not feasible to establish an intersection at East 7th Street and Fruitvale Avenue since the intersection would trigger upgrades to the UPRR line, which would require a taking of private property rights from an adjacent property on East 7th Street.

## 5.2 Impacts of the East 7th Street Extension Project Variant

This section presents the impacts of the East 7th Street Extension Project Variant, with the emphasis on impacts that differ from those identified for the proposed Project without this variant.

### Air Quality

Construction and operation of the East 7th Street Extension Project Variant would result in ***the same Air Quality impacts*** as the construction and operation analyzed for the Project in Chapter 4. Implementation of the Project Variant would result in additional construction activity and construction activity in an area closer to the existing residential uses to the north. However, the Air Quality analysis in Chapter 4 was prepared for the original project proposal that included the East 7th Street extension and the analysis relies on construction details that incorporate the additional construction activities and offsite improvements associated with the Project Variant. The modest additional construction activity and footprint results in a conservative analysis of the Project and captures the Project Variant. Therefore, the Project Variant would result in the same construction-related air quality impacts as those disclosed in Chapter 4 for the Project.

The Project Variant would not result additional vehicle trips and therefore would not result in different operational air quality impacts related to criteria air pollutants, CO concentrations, or new sources of toxic air contaminants. Other than the distribution of passenger vehicle traffic surrounding the Project site, operational activities associated with the Project Variant would be the same as those for the Project and would result in the same air quality impacts as those disclosed in Chapter 4 for the Project.

### Biological Resources

Construction and operation of the East 7th Street Extension Project Variant would result in ***the same impacts on Biological Resources*** as the construction and operation analyzed for the Project in Chapter 4. Implementation of the Project Variant would result in additional construction activity and construction activity in an area closer to the existing residential uses to the north. However, the Biological Resources analysis in Chapter 4 was prepared for the original project proposal that included the East 7th Street extension and the analysis relies on construction details that incorporate the additional construction activities and offsite improvements associated with the Project Variant. The modest additional construction activity and footprint results in a

conservative analysis of the Project and captures the Project Variant. Therefore, the Project Variant would result in the same construction-related biological resources impacts as those disclosed in Chapter 4 for the Project.

Other than the distribution of passenger vehicle traffic surrounding the Project site, operational activities associated with the Project Variant would be the same as those for the Project and would result in the same impacts on biological resources as those disclosed in Chapter 4 for the Project.

## Greenhouse Gas (GHG) Emissions

Construction and operation of the East 7th Street Extension Project Variant would result in ***the same impacts related to GHG Emissions*** as the construction and operation analyzed for the Project in Chapter 4. Implementation of the Project Variant would result in additional construction activity and construction activity in an area closer to the existing residential uses to the north. However, the GHG analysis in Chapter 4 was prepared for the original project proposal that included the East 7th Street extension and the analysis relies on construction details that incorporate the additional construction activities and offsite improvements associated with the Project Variant. The modest additional construction activity and footprint results in a conservative analysis of the Project and captures the Project Variant. Therefore, the Project Variant would result in the same construction-related GHG emissions impacts as those disclosed in Chapter 4 for the Project.

Other than the distribution of passenger vehicle traffic surrounding the Project site, operational activities associated with the Project Variant would be the same as those for the Project and would result in the same impacts related to GHG emissions as those disclosed in Chapter 4 for the Project.

## Hazards and Hazardous Materials

Construction and operation of the East 7th Street Extension Project Variant would result in ***the same impacts related to Hazards and Hazardous Materials*** as the construction and operation analyzed for the Project in Chapter 4. Implementation of the Project Variant would result in additional construction activity and construction activity in an area closer to the existing residential uses to the north. However, the Hazards and Hazardous Materials analysis in Chapter 4 was prepared for the original project proposal that included the East 7th Street extension and the analysis relies on construction details that incorporate the additional construction activities and offsite improvements associated with the Project Variant. The modest additional construction activity and footprint results in a conservative analysis of the Project and captures the Project Variant. Therefore, the Project Variant would result in the same construction-related hazards and hazardous materials impacts as those disclosed in Chapter 4 for the Project.

The Project Variant would result in a different vehicle trip distribution surrounding the Project site. The additional east-west connection would further improve traffic flow and emergency access compared with the Project-related improvements, and the Project Variant would provide adequate emergency access and would not fundamentally impair implementation of or physically interfere with an adopted emergency response or evacuation plan, the same as disclosed for the

Project. Other than the distribution of passenger vehicle traffic surrounding the Project site, operational activities associated with the Project Variant would be the same as those for the Project and would result in the same impacts related to hazards and hazardous materials as those disclosed in Chapter 4 for the Project.

## Noise

Construction and operation of the East 7th Street Extension Project Variant would result in ***the same Noise impacts*** as the construction and operation analyzed for the Project in Chapter 4. Implementation of the Project Variant would result in additional construction activity and construction activity in an area closer to the existing residential uses to the north. However, the Noise analysis in Chapter 4 was prepared for the original project proposal that included the East 7th Street extension and the analysis relies on construction details that incorporate the additional construction activities and offsite improvements associated with the Project Variant. The modest additional construction activity and footprint results in a conservative analysis of the Project and captures the Project Variant. Therefore, the Project Variant would result in the same construction-related noise impacts as those disclosed in Chapter 4 for the Project.

The Project Variant would result in a different vehicle trip distribution and different increases in traffic-related operational noise compared with the Project. **Table 5-1** below shows the existing plus Project Variant traffic noise levels along roadway segments most affected by Project Variant traffic. Although the noise levels differ from those for the Project without the Variant as presented in Table 4.5-10 in Section 4.5, *Noise*, the increase in traffic noise would still be less than 5 dBA at all analyzed roadway segments and the impact would be less than significant, the same operational noise impact (Impact NOI-3) as was disclosed for the Project in Chapter 4.

**TABLE 5-1**
**PEAK-HOUR TRAFFIC NOISE LEVELS (dBA) NEAR THE PROJECT SITE[a,b]**

| Roadway Segment | Hourly $L_{eq}$, dBA | | |
|---|---|---|---|
| | Existing | Existing Plus Project Variant | Difference between Existing Plus Project and Existing |
| E 9th Street east of Fruitvale Avenue | 62.1 | 62.1 | +0.0 |
| E 8th Street east of Fruitvale Avenue | 57.9 | 57.9 | +0.0 |
| Elmwood Avenue west of Fruitvale Avenue | 62.3 | 62.6 | +0.3 |
| Fruitvale Avenue south of E 8th Street/Elmwood Avenue | 67.6 | 67.8 | +0.2 |
| East 7th Street west of Fruitvale Avenue | 58.9 | 59.1 | +0.2 |
| Fruitvale Avenue north of East 7th Street | 67.6 | 67.8 | +0.2 |
| High Street north of Howard Street | 68.9 | 69.0 | +0.1 |

NOTES:
[a] Noise levels were determine using methodology described in FHWA Traffic Noise Model Technical Manual.
[b] Traffic noise increases greater than 5 dB is considered a significant increase in ambient noise levels according to the City of Oakland significance thresholds.

## Transportation

Construction and operation of the East 7th Street Extension Project Variant would result in ***the same Transportation and Circulation impacts*** as the construction and operation analyzed for the Project in Chapter 4. Implementation of the Project Variant would result in additional construction activity and construction activity in an area closer to the existing residential uses to the north. However, the Transportation and Circulation analysis in Chapter 4 was prepared for the original project proposal that included the East 7th Street extension and the analysis relies on construction details that incorporate the additional construction activities and offsite improvements associated with the Project Variant. The modest additional construction activity and footprint results in a conservative analysis of the Project and captures the Project Variant. Therefore, the Project Variant would result in the same construction-related transportation and circulation impacts as those disclosed in Chapter 4 for the Project.

As described above, the Project Variant would extend East 7th Street from Fruitvale Avenue to 36th Avenue along the north side of the Project site. The proposed street would be a 30-foot curb-to-curb street with minimum 5.5-foot sidewalks on both sides and would accommodate one travel lane and one parking lane in each direction. Other than the distribution of passenger vehicle traffic surrounding the Project site, operational activities associated with the Project Variant would be the same as those for the Project and would result in the same impacts related to transportation as those disclosed in Chapter 4 for the Project. In addition, the added east-west extension would support the Project's consistency with the City's CEAP, specifically with Policy Connection C-C.

## Effects Not Found to be Significant

As described above, implementation of the Project Variant would result in additional construction activity and construction activity in an area closer to the existing residential uses to the north. However, the analyses in Section 4.7, *Effects Not Found to be Significant*, were prepared for the original project proposal that included the East 7th Street extension and the analyses rely on construction details that incorporate the additional construction activities and offsite improvements associated with the Project Variant. The modest additional construction activity and footprint results in conservative analyses of the Project and captures the Project Variant. Therefore, the Project Variant would result in the same construction-related impacts as those disclosed in Section 4.7, *Effects Not Found to be Significant*, for Aesthetics, Shadow, and Wind; Agriculture and Forestry Resources; Cultural Resources; Energy; Geology, Soils, and Paleontological Resources; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Population and Housing; Public Services; Recreation; Tribal Cultural Resources; Utilities and Service Systems; and Wildfire.

Other than the distribution of passenger vehicle traffic surrounding the Project site, operational activities associated with the Project Variant would be the same as those for the Project and would result in the same impacts as those disclosed in Chapter 4 for the Project pertaining to the topics listed above.

Specifically, the following operational impact analyses considered the East 7th Street extension directly. The Land Use and Planning analysis concluded that the improved connections surrounding the Project site would not physically divide an established community, and the impact would be less than significant. The added east-west connection associated with the Project Variant would contribute to these improved conditions.

The Public Services analysis concluded that improved vehicle circulation around the Project site would benefit existing response access for the Oakland Fire Department. The Project Variant would contribute to this improved circulation. The analysis also found that upgraded sidewalks and new intersection at Alameda Avenue and 37th Avenue would increase safety surrounding the Project site. These changes would not generate an unusual or substantial increased demand for police services or require new or physically altered police facilities. The Project Variant would add a minimum 5.5-foot sidewalks on both sides of the East 7th Street extension and signalize the Fruitvale Avenue/East 7th Street intersection. These changes would also increase safety surrounding the Project site and would not generate an unusual or substantial increased demand for police services or require new or physically altered police facilities.

## 5.3 Summary

Development of the Project combined with the East 7th Street Extension Project Variant would result the same impacts as the Project. All City of Oakland SCAs and Mitigation Measures identified for the Project in Chapter 4 would apply to the Project combined with the East 7th Street Extension Project Variant. There would be no new or changed impacts and no additional mitigation measures would be required for the topics discussed above.

This page intentionally left blank

# CHAPTER 6
# Alternatives

Pursuant to the provisions of CEQA, this chapter is provided to describe and evaluate alternatives to the Project, including a "No Project" alternative, and to identify one or more "environmentally superior" alternatives. The primary purpose of this section is to provide decision-makers and the public with a qualitative review of alternatives to the Project that eliminate or substantially reduce any identified adverse environmental impacts while, at the same time, attaining most of the basic objectives of the Project.

The focus of the alternatives analysis in this chapter is on assessing the extent to which the Project alternatives would result in eliminating or reducing impacts identified as less than significant with mitigation measures and Standard Conditions of Approval (SCAs), and less than significant with SCAs in Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*. No significant and unavoidable impacts were identified for the Project.

## 6.1 CEQA Requirements

CEQA requires an evaluation of the comparative effects of a range of reasonable alternatives to a project that would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project on the environment (CEQA Guidelines Section 15126.6(a)). An EIR considers a range of potentially feasible alternatives to foster informed decision-making and public participation. The discussion of alternatives focuses on alternatives to the Project or its location that are capable of avoiding or substantially lessening any significant effects of the Project, even if these alternatives would impede, to some degree, the attainment of the Project objectives, or would be costlier (CEQA Guidelines Section 15126.6(b)).

The focus of the alternatives analysis under CEQA is the avoidance or substantial lessening of a project's significant environmental effects. Chapter 4 of this EIR assesses the direct and indirect environmental impacts that could potentially result from implementation of the Project. This environmental impact analysis includes consideration and discussion of the Project's potentially significant environmental effects with the application of all applicable City SCAs and identifies mitigation measures needed to reduce potentially significant environmental impacts to a less-than-significant level.

In considering the alternatives analysis provided in this chapter, CEQA's substantive mandate is as follows: "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects" of the project (CEQA Statute, Public Resources Code

Section 21002). Accordingly, this chapter presents a range of alternatives to the Project and a meaningful comparative analysis of the Project impacts, as identified in Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*, of this EIR (CEQA Guidelines Section 15126.6(d)); identifies and discusses any alternatives that were considered by the City, as lead agency, but that the City rejected for detailed analysis in this EIR (CEQA Guidelines Section 15126.6(c)); and provides comparative evaluation of the Project to a No Project alternative (CEQA Guidelines Section 15126.6(e)).

## 6.2 Factors in the Selection of Alternatives

The nature and scope of the reasonable range of alternatives to be discussed is governed by the "rule of reason." The CEQA Guidelines recommend that an EIR should briefly describe the rationale for selecting the alternatives to be discussed (Section 15126.6(c)). This alternatives analysis considers the following factors:

- The extent to which the alternative would accomplish most of the basic objectives of the Project;
- The extent to which the alternative would avoid or lessen the identified less than significant, less than significant with SCAs, or less than significant with SCAs and mitigation measures environmental effects of the Project;
- The feasibility of the alternative, taking into account site suitability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations;
- The extent to which an alternative contributes to a "reasonable range" of alternatives necessary to permit a reasoned choice; and
- The CEQA Guidelines requirement to consider a "No Project" alternative, and to identify an "environmentally-superior" alternative in addition to the No Project alternative (Section 15126.6(e)).

### 6.2.1 Project Objectives

As stated in the first factor bulleted above, under Section 5.2, *Factors in the Selection of Alternatives*, the selection of alternatives shall consider the basic objectives of the Project. As previously presented in Chapter 3, *Project Description*, the following objectives have been identified for the Project:

- Achieve increased economic benefit from the site.
- Create a modern warehouse that contributes to the aesthetics of the Project site.
- Facilitate the evolution of a transforming industrial workplace.
- Create a new efficient and updated warehouse which implements green building design and construction practices capable of achieving Leadership in Energy and Environmental Design (LEED™) certification for the building within the Project.

- Encourage productive use of the City's industrial land which is currently underutilized.
- Support and retain existing industrial uses and employment in the City of Oakland's industrial sector.
- Receive ACDEH and EPA approval to remediate the environmental conditions to allow for safe usage of the site.
- Help achieve the goals of the Central Estuary Area Plan (CEAP) through creating network connections and maintaining industrial uses.
- Upgrade the Bay Trail network and its connection to points to the north and south.

## 6.2.2 Impacts Identified

As stated above under Section 5.2, *Factors in the Selection of Alternatives*, in the second factor bulleted, the selection of alternatives shall consider the ability for each alternative to avoid or lessen the identified less than significant with SCAs or less than significant with SCAs and mitigation measures environmental effects of the Project. This evaluation of alternatives focuses on assessing the extent to which the Project alternatives would result in eliminating or reducing the significant impacts that have been identified in Chapter 4. For each alternative, the degree (severity) of adverse impacts that would be caused by the alternative is identified and compared to the Project. At the conclusion of these comparisons, the Environmentally Superior Alternatives is identified among the Project and all alternatives, taking into consideration all impacts identified.

The only impact requiring mitigation identified for the project is the impact on biological resources listed below in **Table 6-1**. As described in Section 4.2, *Biological Resources*, initial construction activities, such as those required for demolition and site remediation, would result in a significant impact requiring mitigation. As described in Section 4.4, *Hazards and Hazardous Materials*, various chemicals have been detected in soil vapor, soil, and groundwater at various locations throughout the Project site. With such hazardous conditions, site remediation would likely be required for any form of site demolition or reuse. For this reason, the No Project Alternative, described below, is considered the only alternative with the ability to avoid this less than significant with SCAs and mitigation measures environmental effect of the Project.

**TABLE 6-1**
**PROJECT IMPACTS IDENTIFIED IN CHAPTER 4**

| Project Impacts |
|---|
| **Biological Resources** |
| • **Impact BIO-1:** Implementation of the Project would not have a substantial adverse effect, either directly, indirectly, or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS (nesting birds and roosting bats). (*Less than Significant Impact, with SCAs and Mitigation*) |

## 6.3 Alternatives Considered but Rejected for Further Evaluation

CEQA Guidelines Section 15126.6(c) requires an EIR to identify and briefly discuss any alternatives that were considered by the lead agency and rejected from further evaluation. In identifying alternatives to the Project, primary consideration was given to alternatives that would reduce impacts while still meeting most of the basic objectives as well as the City's planning goals and objectives, such as those articulated in the General Plan. Alternatives that would likely have impacts that are the same as or greater than the Project or that would not meet most of the basic objectives were rejected from further consideration.

The City considered potential off-site locations relative to the Project, with the goal of comparing the impacts of development of the same or a similar nature at a different location within the City. However, alternative sites for the Project were considered but determined to be infeasible for several reasons: while the Project Applicant may own other parcels in the City that could accommodate this Project, (a) other sites would not repurpose the existing underutilized heavy industrial parcel and encourage productive use of the City's industrial land, and achieve the goals of the CEAP; (b) other sites would not remediate the environmental conditions to allow for safe usage of the site; and (c) other sites would not provide the opportunity to upgrade the Bay Trail network and its connection to points to the north and south. Furthermore, given the City's current level of urban development, an alternative site location would not necessarily avoid or substantially reduce Project impacts. For these reasons, an off-site alternative was not carried forward for detailed analysis as a reasonable alternative.

## 6.4 Selected Alternatives Selected and Comparative Analysis

Based on the screening process described above, the City has identified the following reasonable range of alternatives to be addressed in this EIR:

- **Alternative 1:** No Project Alternative
- **Alternative 2:** No Street Extension Alternative

This section presents a discussion of the comparative environmental effects of each alternative compared to the effects of the Project. As permitted by CEQA, the significant effects of the alternatives are discussed in this EIR in less detail than are the effects of the proposed Project (CEQA Guidelines Section 15126.6(d)). All impacts are described after implementation of any SCAs identified in Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*, of this EIR. **Table 6-2** presents a comparison of alternatives (and a summary of the Project) carried forward for consideration and evaluation.

**TABLE 6-2**
**DESCRIPTION OF PROJECT AND ALTERNATIVES SELECTED FOR EVALUATION**

| | Project | Alternative 1: No Project Alternative | Alternative 2: No Street Extension Alternative |
|---|---|---|---|
| Meets most basic objectives? | Yes | No | No |
| Substantially avoids or lessens Impacts? | No | Yes | Yes |

NOTES: LTS = Less Than Significant; SF = Square Feet; NA = Not Applicable

## 6.4.1 Alternative 1: No Project Alternative / No Development

The No Project Alternative is the circumstance under which the Project does not proceed. This alternative is analyzed consistent with CEQA Guidelines Section 15126.6(e), which states that the No Project Alternative must include the assumption that conditions at the time the Notice of Preparation of an EIR was circulated for public review would not be changed because the Project would not be constructed, as well as the events or actions that would reasonably be expected to occur in the foreseeable future if the Project were not approved.

Under the No Project Alternative, the Project would not be built, and the site would remain in the same state as its current condition. The existing vacant Owens-Brockway Glass manufacturing facility would remain in place and the new 430,000-square-foot industrial building would not be constructed at the site. As noted above, demolition or refurbishment and reuse of the existing facility would likely require remediation activities resulting in an impact on biological resources similar to the effects of the Project. Therefore, this alternative assumes the project site will remain vacant. In addition, the upgrades to pedestrian and bicycle facilities, as well as roadway improvements, would not be constructed and the transportation infrastructure surrounding the site would remain the same.

### Comparative Analysis

CEQA Guidelines Section 15126.6(e) requires consideration of a No Project Alternative. This analysis discusses the existing conditions at the time the NOP was published, as well as what reasonably would be expected to occur in the foreseeable future if the Project were not approved, based on current General Plan and consistent with available infrastructure and community services.

If the No Project Alternative is selected, no development on the project site would occur. The existing vacant Owens-Brockway Glass manufacturing facility buildings would remain vacant, and the existing site would remain as it is. Because the alternative poses no development on the project site compared to existing baseline conditions, no impacts would result. As such, this alternative would have reduced impacts compared to the Project with respect to aesthetics; air quality; biological resources; cultural resources; energy; geology, soils, and paleontological resources; greenhouse gas (GHG) emissions; hazards and hazardous materials; hydrology and water quality; land use and planning; noise and vibration; population and housing; public

services; recreation; transportation and circulation; tribal cultural resources; and utilities and service systems.

However, the site would not be remediated and would remain unsafe for development. The underutilized site would not be repurposed into productive larger-scale heavy industrial use consistent with the goals of the CEAP. There would be no new permanent employment in the industrial sector nor increased economic benefit from the site. There would be no upgrade to the Bay Trail network along the Project site boundary.

This alternative would avoid the significant and mitigable Project impact to nesting birds and roosting bats. However, this alternative would not meet any of the objectives of the Project.

### 6.4.2 Alternative 2: No Street Extension Alternative

The No Street Extension Alternative was developed in response to requests made through public comments on the NOP. Several commenters asked not to extend East 7th Street (evaluated as a Project Variant in Chapter 5) or 37th Avenue, not to open Boehmer Street, and to leave surrounding residential streets unchanged. Therefore, Alternative 2, No Street Extension Alternative, assumes the Project would remediate and develop the Project site with the same 430,000-square-foot industrial building, but with minimal off-site improvements along the northern and eastern boundaries of the Project site. Specifically, this alternative would relocate Alameda Avenue approximately 100 feet to the north and provide a 5.5-foot landscape buffer and 5.5-foot sidewalk on the north side of the street. It would provide an 8-foot landscape buffer, 8-foot sidewalk, up to 28-foot landscape area, and a 12-foot Class I shared-used path on the south side of the street adjacent to the estuary, which would be part of the San Francisco Bay Trail. Along the Project southern frontage, the roadway would accommodate two westbound travel lanes and one eastbound travel lane. The roadway would also provide Class 2B buffered bicycle lanes in both directions.

Unlike the proposed Project, under this alternative the Project Applicant would not dedicate rights-of-way on 37th Avenue and East 7th Street (under the Project Variant) or provide new north-south and east-west street network connections along the Project site and no construction activity would occur in this area. Specifically:

- This alternative would not extend East 7th Street from Fruitvale Avenue to 36th Avenue for a potential future new east-west connection along the north side of the Project site. It would not provide sidewalks in this area (evaluated as a Project Variant in Chapter 5).
- Boehmer Street, which extends between 36th and 37th Avenues, would remain closed and gated. This alternative would not open Boehmer Street as a public street to connect to 36th Avenue.
- This alternative would not extend 37th Avenue from the current cul-de-sac south of Boehmer Street to Alameda Avenue along the east side of the Project site. It would not provide sidewalks or a parking lane in this area.

## Comparative Analysis

As described above in Section 5.2, the alternatives analysis considers the extent to which the alternative avoids or substantially lessens one or more of the significant effects, the extent to which the alternative accomplishes most of the basic objectives of the project, and the feasibility of the alternative taking into account consistency with applicable plans.

Under this alternative, construction activity would not extend beyond the parking lots along the northern and eastern Project site (see new proposed property line on Figure 3-2). With the additional distance between the closest sensitive receptor to the north and the extent of the construction activity, less-than-significant impacts related to construction noise and construction-related health risk associated with toxic air contaminants would be reduced. With a reduced overall construction footprint, other construction-related air quality and greenhouse gas emissions less-than-significant impacts may be reduced although by a negligible amount. This alternative would not avoid or substantially reduce any impacts related to Biological Resources, Hazards and Hazardous Materials, or any other resource areas described in Section 4.7.

Alternative 2 would be assumed to generate the same number of truck trips, although the truck routes shown in Figure 4.6-3 would be revised to rely on a single designated driveway on Alameda Avenue. Trucks would still use Alameda Avenue and High Street, which are the designated truck routes in the Project vicinity. Automobile access would be limited to two driveways: one driveway on the existing (unextended) 37th Avenue and one driveway on East 7th. This alternative would not avoid or substantially reduce any impacts related to Transportation and Circulation although there could be minor increases automobile and truck trip lengths resulting in minor increases in VMT and potentially air quality impacts. Regardless, Alternative 2 would not result in any new impacts related to Transportation and Circulation.

This alternative would meet most of the objectives of the Project although it would not provide the same easy access to freeways, rails, airports, and seaports when compared with the Project and it would not help achieve the goals of the CEAP through creating network connections. Specifically, the CEAP envisions providing additional east-west and north-south connections in this area and includes policy-level recommendations for enhancing the local street network including:

- Provide a central connector between Fruitvale Avenue and 37$_{th}$ Avenue from which new development could be accessed if large-scale properties in the area were to develop in the future.
- Change Elmwood Avenue and 36th Avenue from cul-de-sacs into through streets;
- Change 37th Avenue from a cul-de-sac into a through street;
- Enhance emergency access through the area; and
- Enhance local connectivity and access.

Without the proposed street extensions, Alternative 2 would be considered inconsistent with the CEAP. These specific CEAP policies were not adopted for the purposes of protecting the environment and conflicts would not be considered a significant land use impact under CEQA.

# 6.5 Overall Comparison of Proposed Project with Alternatives

The analysis of Project alternatives is summarized and compared in **Table 6-3**, which provides a summary of impact levels within all environmental topic areas.

## 6.5.1 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify an environmentally superior alternative. If the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts to the project area and its surrounding environment. CEQA Guidelines Section 15126.6(a) places emphasis on alternatives that "avoid or substantially lessen the significant effects" of a project.

The No Project Alternative would be the most environmentally superior alternative with the fewest environmental impacts. However, the No Project Alternative does not meet any of the basic objectives of the Project.

Since the environmentally superior alternative is the No Project Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. However, this EIR presents only the No Project and the No Street Extension alternatives as no other scenario was deemed reasonable and feasible. Evaluating an environmentally superior alternative can be difficult because many factors must be balanced. For example, the No Street Extension Alternative could be considered environmentally superior because, relative to the Project, it would result in incrementally reduced construction impacts from slightly reduced construction activity in a location slightly more removed from the closest sensitive receptors, even though the impact conclusions would be the same as the Project. However, while the No Street Extension Alternative would result in slightly reduced construction-related impacts, it would not be as supportive of CEAP goals for providing east-west and north-south connections in this area.

For the purposes of this EIR, the City has identified the Project and Project with the Project Variant as the environmentally superior alternative because feasible mitigation measures have been determined to be available to reduce all potentially significant environmental impacts to less-than-significant levels, and it would support CEAP goals for providing east-west and north-south connections in the Project vicinity. Nonetheless, City decision-makers may weigh the relative benefits of the alternatives differently and with additional information received in or developed during the Project approval process reasonably could reach a different decision.

In considering the alternatives analysis provided in this chapter, CEQA's substantive mandate is as follows: "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects" of the project (CEQA Statute, Public Resources Code, Section 21002). For the Project, feasible mitigation measures have been determined to be

available to reduce all potentially significant environmental impacts to less-than-significant levels. So long as these identified mitigation measures are either incorporated into the Project or made a condition of Project approval, the availability of feasible alternatives becomes somewhat of a less important consideration, as they would not *substantially* lessen or avoid significant environmental effects of the Project.

**TABLE 6-3**
**PROJECT ALTERNATIVES IMPACT SUMMARY AND COMPARISON**

| Impact | Alternative 1: No Project Alternative | Alternative 2: No Street Extension Alternative | Project |
|---|---|---|---|
| Aesthetics, Shadow, Wind | No Impact | Less than Significant | Less than Significant |
| Agriculture and Forestry Resources | No Impact | No Impact | No Impact |
| Air Quality | No Impact | LTS with SCAs ⇩ | LTS with SCAs |
| Biological Resources | No Impact | LTS with SCAs and MM | LTS with SCAs and MM |
| Cultural Resources | No Impact | LTS with SCAs | LTS with SCAs |
| Energy | No Impact | LTS with SCAs | LTS with SCAs |
| Geology and Soils | No Impact | LTS with SCAs | LTS with SCAs |
| Greenhouse Gas Emissions | No Impact | LTS with SCAs ⇩ | LTS with SCAs |
| Hazards and Hazardous Materials | No Impact | LTS with SCAs | LTS with SCAs |
| Hydrology and Water Quality | No Impact | LTS with SCAs | LTS with SCAs |
| Land Use and Planning | No Impact | Less than Significant | Less than Significant |
| Mineral Resources | No Impact | No Impact | No Impact |
| Noise | No Impact | LTS with SCAs ⇩ | LTS with SCAs |
| Population and Housing | No Impact | Less than Significant | Less than Significant |
| Public Services and Recreation | No Impact | LTS with SCAs | LTS with SCAs |
| Transportation and Circulation | No Impact | LTS with SCAs ⇧ | LTS with SCAs |
| Tribal Cultural Resources | No Impact | LTS with SCAs | LTS with SCAs |
| Utilities and Service Systems | No Impact | LTS with SCAs | LTS with SCAs |
| Wildfire | No Impact | No Impact | No Impact |

NOTES: LTS = Less than Significant, SCAs = Standard Conditions of Approval, MM = Mitigation Measure, SU = Significant and Unavoidable

⇧/⇩ - The impact is more/less severe than compared to the Project.

The color gradients in the table are a visual representation of the significance findings with the lightest or absence of color representing the least amount of impact, and the darkest shade representing an impact that would be significant without mitigation.

# CHAPTER 7
# Other Statutory Sections

Consistent with the CEQA Guidelines Section 15126.2, this section discusses significant environmental effects, significant irreversible environmental changes, and growth-inducing impacts associated with development of the Project. Project effects that were found to be less than significant are also discussed. Cumulative impacts are separately discussed in Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*.

## 7.1 Significant Environmental Effects

In accordance with CEQA Guidelines sections 15064 and 15065, an EIR must identify impacts that would not be eliminated or reduced to an insignificant level by mitigation measures included as part of the proposed project, or by other mitigation measures that would be implemented.

As discussed throughout Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*, development of the Project would result in a conservatively-determined significant and unavoidable impact with incorporation of Standard Conditions of Approval (SCAs), for construction-period noise.

## 7.2 Significant Irreversible Environmental Changes

An EIR must identify any significant irreversible environmental changes that could result from project development. These may include current or future uses of non-renewable resources, and secondary or growth-inducing impacts that commit future generations to similar uses. CEQA dictates that irretrievable commitments of resources should be evaluated to assure that such current consumption is justified (CEQA Guidelines Section 15126.2(c)). The CEQA Guidelines identify three distinct categories of significant irreversible changes: (1) changes in land use that would commit future generations; (2) irreversible changes from environmental actions; and (3) consumption of non-renewable resources.

### 7.2.1 Changes in Land Use That Would Commit Future Generations

The Project would result in growth and development within the City of Oakland consistent with *Plan Bay Area 2040* growth projections for the City and the region. Further, development of the Project would occur within an urbanized area surrounded by similar or compatible uses and would not commit future generations to significant changes in land use that would result in

significant and unavoidable adverse impacts, as discussed in Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*.

### 7.2.2 Irreversible Changes from Environmental Accidents

As discussed in Section 4.4, *Hazards and Hazardous Materials*, no significant irreversible environmental damage, such as what could occur as a result of an accidental spill or explosion of hazardous materials, is anticipated due to development of the Project. Furthermore, compliance with Federal, state, and local regulations as well as City of Oakland Standard Conditions of Approval (SCAs) associated with hazards and hazardous materials identified in Section 4.4 would reduce the possibility that hazardous substances associated with development of the Project would result in irreversible environmental damage from accidental spill or explosion.

### 7.2.3 Consumption of Non-renewable Resources

Consumption of non-renewable resources includes conversion of agricultural lands, loss of access to mining reserves, and use of non-renewable energy sources. As described in Section 4.7.2, *Agriculture and Forestry Resources*, the Project site is not located on agricultural land (DOC, 2019); therefore, no agricultural land would be converted to non-agricultural uses.

As discussed in Section 4.7.8, *Mineral Resources*, the Project site is located on land classified by the California Department of Conservation's (DOC's) Division of Mines and Geology as Mineral Resource Zone 1 (MRZ-1), or an area where adequate geologic information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence (DOC, 1987; 2020). Therefore, the Project would not result in the loss of availability of a known mineral resource and would not result in the loss of a locally important mineral resource recovery site.

Resources that would be permanently and continually consumed by implementation of the Project include water, electricity, and fossil fuels; however, the amount and rate of consumption of these resources would not result in significant environmental impacts or the unnecessary, inefficient, or wasteful use of resources, as discussed in Section 4.7.4, *Energy*. Project construction activities would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels such as gasoline and diesel for automobiles and construction equipment. With respect to the operational activities of the Project, compliance with all applicable building codes, as well as City of Oakland SCAs, would ensure that all natural resources are conserved to the maximum extent practicable. New technologies or systems may also emerge over the lifetime of the Project, or would become more cost-effective or user-friendly, and would further reduce the Project's reliance upon nonrenewable energy resources.

## 7.3 Growth-Inducing Impacts

This section addresses the ways that development of the Project "could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (Section 15126.2(d) of the CEQA Guidelines). This section

summarizes topics and impacts also addressed in Section 4.7.9, *Population and Housing*, which provides the context for evaluating growth-inducing impacts.

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement could result if a project involved construction of new housing. A project can have indirect growth-inducement potential if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) or if it would involve a substantial construction effort with substantial short-term employment opportunities and indirectly stimulate the need for additional housing and services to support the new employment demand. Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA Guidelines also require analysis of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The timing, magnitude, and location of land development and population growth is based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. General plans define the location, type, and intensity of growth and thus are the primary means of regulating development and growth in California.

The growth-inducing impacts analysis addresses the potential of the Project for growth inducement in the Project vicinity or broader area. Under CEQA, a project is generally considered to be growth-inducing if it results in any one of the following:

1. Extension of urban services or infrastructure into a previously unserved area;
2. Extension of a transportation corridor into an area that may be subsequently developed; or
3. Removal of obstacles to population growth (such as provision of major new public services to an area where those services are not currently available).

## 7.3.1 Extension of Urban Services or Infrastructure

As discussed in Sections 4.7.10, *Public Services*, and 4.7.11*, Recreation*, the Project is located in an urban area already served by City fire, police, school, and park services. Therefore, the Project would not require the extension of urban services into a previously unserved area. Additionally, as described in Section 4.7.14, *Utilities and Service Systems*, the Project would involve the installation of new utility infrastructure to connect the Project to existing utility lines. Although infrastructure improvements would occur as part of the Project, extension of these facilities would not indirectly induce substantial population growth, because the Project site is located within a developed area. Required infrastructure improvements would be limited in extent, and would not

likely facilitate the development or redevelopment of other properties within the vicinity of the Project site.

## 7.3.2 Extension of a Transportation Corridor

Primary regional auto access to the Project site is available from Interstate 880, approximately 0.3 miles to the north. As discussed in Section 4.6, *Transportation and Circulation*, the pedestrian, bicycle, and transit access between the sites and throughout the nearby areas is good. Most existing streets in the Project vicinity provide sidewalks on at least one side of the street. The Project is currently served by several bicycle facilities including Class 2 bicycle lanes along Fruitvale and Alameda Avenues, and a Class 1 facility along the Oakland Estuary south of Alameda Avenue, which is part of the Bay Trail. The Project site is well-served by existing regional and local transportation and is approximately 0.6-mile walking distance from the Fruitvale BART Station and is currently served by AC Transit bus service along Fruitvale Avenue.

The Project would include several changes to the adjacent roadway network, including opening Boehmer Street, and relocating Alameda Avenue approximately 100-feet to the north. The Project would include 5.5- to 8-foot sidewalks on both sides of each new or reconstructed roadway and a 12-foot Class I shared-used path on the south side of Alameda Avenue. These changes and improvements to the roadway network do not include an extension of any major transportation corridor. The Project site is in a developed urban area well-served by existing regional and local transportation. Therefore, the Project would not extend transportation corridors into undeveloped areas resulting in growth-inducing impacts.

## 7.3.3 Removal of Obstacles to Population Growth

Section 15126.2(d) of the CEQA Guidelines states that an EIR should discuss "the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." CEQA requires a discussion of how a project could increase population, employment, or housing in the areas surrounding the project site as well as an analysis of the infrastructure and planning changes that would be necessary to implement the project.

The Project involves the addition of heavy industrial uses on a site that currently contains a vacant industrial facility, therefore directly stimulating population growth, the impacts of which are analyzed throughout Chapter 4, *Environmental Setting, Impacts, and Standard Conditions of Approval*. The Project site is adjacent to existing urban development including primarily commercial (e.g., retail, gym, a roofing company, Home Depot) and residential uses. Any proposed development on parcels surrounding the Project would be subject to project-specific CEQA review.

Section 4.7.9, *Population and Housing*, analyzes the Project's overall effect on population and housing, including growth-inducing considerations. The Project would result in construction employment. The employment growth associated with construction work, however, would be limited and temporary, and the majority of construction workers are anticipated to originate from

the local and regional labor pool, and would not relocate within the City, further reducing the potential for secondary effects. The Project would also result in jobs for approximately 350 permanent employees on the Project site from proposed office and retail uses. However, as discussed in Section 4.7.9, the Project's employment increase represents a small increment of the *Plan Bay Area 2040*-projected growth within the City, which would not constitute substantial unplanned employment growth within the City. Accordingly, the employment opportunities provided during operation are not anticipated to induce substantial population growth in the region.

The Project would not remove obstacles to additional growth through the extension of utilities that would facilitate new growth, because it would be undertaken in a developed urban area that is currently otherwise served by all utilities and services and would only require the minor extension of utility infrastructure to serve the Project site. Similarly, the Project would not overburden existing infrastructure so as to require construction of new facilities that could result in significant impacts, as discussed in the Section 4.7.14, *Utilities and Service Systems*.

### 7.3.4 Summary

The Project is not likely to encourage (or induce) other development in the surrounding area; regardless, the collective impacts of any such growth have been considered in the *Plan Bay Area 2040* growth projections, and/or have been assessed in this EIR's consideration of cumulative impacts.

## 7.4 Cumulative Impacts

The approach used in this EIR for cumulative impact analysis is described in the introduction to Chapter 4 (Section 4.0). The analysis of each environmental topic included in Chapter 4 evaluates possible cumulative impacts considering regional development in combination with development of the Project.

Construction and operation of the Project, in combination with cumulative development in the surrounding area, would not result in significant and unavoidable impacts under cumulative conditions.

## 7.5 Effects Not Found to Be Significant

As required by CEQA, this EIR focuses on expected significant environmental effects (CEQA Guidelines Section 15143). In accordance with Section 15128 of the CEQA Guidelines, an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Effects not found to be significant are specifically discussed under each applicable environmental topic section in Section 4.7.

# 7.6 References – Other Statutory Sections

California Department of Conservation (DOC). 2020. *State Mining and Geology Board Guidelines, Guidelines for Classification and Designation of Mineral Lands*. Accessed February 25, 2022. https://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf.

DOC. 1987. Division of Mines and Geology, *Special Report 146, Part II, Mineral Land Classification: Aggregate Materials in the San Francisco-Monterey Bay Area*, 1987. Oakland East Quadrangle, Plate 2.19. Accessed February 25, 2022. https://ia902602.us.archive.org/35/items/minerallandclass00stin/minerallandclass00stin.pdf.

# CHAPTER 8
# Report Preparers

## 8.1 Lead Agency

**City of Oakland**
Planning & Building Department
250 Frank H. Ogawa Plaza, Suite 3315
Oakland, California 94612

*Director*: William Gilchrist
*Interim Deputy Director*: Edward Manasse
*Planner*: Peterson Vollmann, Planner IV

## 8.2 EIR Consultants

### Environmental Consultant

**Environmental Science Associates (ESA)**
180 Grand Avenue, Suite 1050
Oakland, California 94612

*Project Director*: Crescentia Brown
*Project Manager*: Elizabeth Kanner

***ESA Technical Analysis***

*Air Quality:* Jyothi Iyer
*Biological Resources:* Brian Pittman, Erika Walther
*Greenhouse Gas Emissions:* Jyothi Iyre, Bailey Setzler
*Hazards and Hazardous Materials:* Michael Burns
*Noise and Vibration:* Jyothi Iyre
*Effects Found Not to Be Significant:* Elizabeth Kanner, Bailey Setzler, Ryan Yasuda; Becky Urbano (Historic Architecture), Johanna Kahn (Historic Architecture), Heidi Koenig (Archaeology, Tribal)
*Project Variant:* Elizabeth Kanner
*Alternatives:* Elizabeth Kanner
*Other CEQA Considerations:* Elizabeth Kanner
*Senior Quality Assurance/Quality Control:* Elizabeth Kanner

***ESA Production Services***

*Word Processing and Editing:* Kristine Olsen, Joel Miller, Logan Sakai
*Graphics and Production:* Ron Teitel

## Transportation Consultant

**Fehr & Peers**
2201 Broadway, Suite 602
Oakland, California 94612

Sam Tabibnia, PE