

DOWNTOWN OAKLAND SPECIFIC PLAN DRAFT ENVIRONMENTAL IMPACT REPORT

State Clearinghouse No. 2019012008



Prepared for:
City of Oakland
August 2019

URBAN
PLANNING
PARTNERS
INC.

CITY OF OAKLAND



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NOTICE OF AVAILABILITY/ RELEASE OF DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE DOWNTOWN OAKLAND SPECIFIC PLAN AND NOTICE OF PUBLIC HEARING ON DEIR

TO: All Interested Parties

SUBJECT: Notice of Availability/Release of Draft Environmental Impact Report (DEIR) for the Downtown Oakland Specific Plan, and Notice of Public Hearing on the same.

REVIEW/COMMENT PERIOD: August 30, 2019 through October 15, 2019

CASE NO: ER 18-020 (CEQA State Clearinghouse Number 2019012008)

PROJECT SPONSOR: City of Oakland

PROJECT LOCATION: The Downtown Oakland Specific Plan (the “Plan”) encompasses approximately 930 acres in Downtown Oakland, generally bound by 27th Street to the north; Brush and Market Streets to the west; the Jack London estuary waterfront and Embarcadero West to the south. The eastern boundary of the Plan extends from the north to Grand Avenue between Broadway and Telegraph Avenue south of Grand Avenue to Lake Merritt, and the Lake Merritt and 5th Avenue, Channel excluding the Lake Merritt Station Area Plan Area east of Franklin Street, north on the street and South of 13th street. The Plan Area’s location is shown in Figure 1, and the Plan Area Boundary is shown in Figure 2.

PROJECT DESCRIPTION: The Plan will provide a roadmap for how the area develops over the next 20 years through policy guidance on land use, transportation, housing, economic development, public spaces, cultural arts, and social equity.

The Plan aims to ensure that Downtown Oakland remains a place of continuing growth and revitalization, as well as a valuable resource for the larger Oakland community through increased employment, housing, arts, and cultural opportunities. Supporting existing residents by growing existing businesses and the creative economy are important to creating a plan that serves both current and future residents.

The Plan builds on extensive community feedback to meet the following goals:

1. Create opportunities for economic growth for all Oaklanders.
2. Ensure sufficient housing is built and retained to meet the varied needs of current and future residents.
3. Make Downtown Oakland’s streets comfortable, safe, and inviting, as well as improve connections to the city as a whole so that everyone has efficient and reliable access to downtown’s jobs and services.
4. Encourage diverse voices and forms of expression to flourish.

5. Provide vibrant public spaces and a healthy environment that improve the quality of life downtown today and for generations to come.
6. Develop Downtown Oakland in a way that meets community needs and preserves Oakland's unique character.

The components of the Plan include:

- The distribution, location, and extent of the uses of land, including open space, within the area covered by the Plan;
- The proposed distribution location, and extent of the uses of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the Plan;
- Standards and criteria by which development will proceed, and standards for the conservation, development, and utilization of natural resources, where applicable; and
- A program of implementation measures, including regulations, public works projects, and financing measures necessary to carry out the proposed improvements

For more information on the Plan, please visit the project website at:

<https://www.oaklandca.gov/topics/downtown-oakland-specific-plan.%20>

ENVIRONMENTAL REVIEW: A Draft Environmental Impact Report (DEIR) was prepared for the project under the requirements of the California Environmental Quality Act (CEQA), pursuant to Public Resources Code Section 21000 *et. seq.* The DEIR analyzes potentially significant environmental impacts in the following environmental categories: Land Use, Traffic and Transportation, Air Quality, Greenhouse Gas Emissions, Cultural Resources, Aesthetics, Biology, Soils and Geology, Hazardous Materials, Hydrology and Water Quality, Noise and Vibration, Population and Housing, Public Services and Recreation, and Utilities. The DEIR identifies significant and unavoidable environmental impacts related to, Traffic and Transportation, Air Quality, Aesthetics, and Cultural Resources. Copies of the DEIR are available for review or distribution to interested parties at no charge at the Department of Planning and Building, Bureau of Planning, 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612, Monday through Friday, 8:30 a.m. to 5:00 p.m. The DEIR may also be reviewed at the following website:

<http://www2.oaklandnet.com /Government/o/PBN/OurServices/Application/DOWD009157.htm>

PUBLIC HEARINGS: The Landmarks Preservation Advisory Board will conduct a public scoping hearing on the DEIR for the project on **Monday, September 23, 2019**, at 6:00 p.m. in Council Chambers, City Hall, One Frank H. Ogawa Plaza, Oakland, CA 94612.

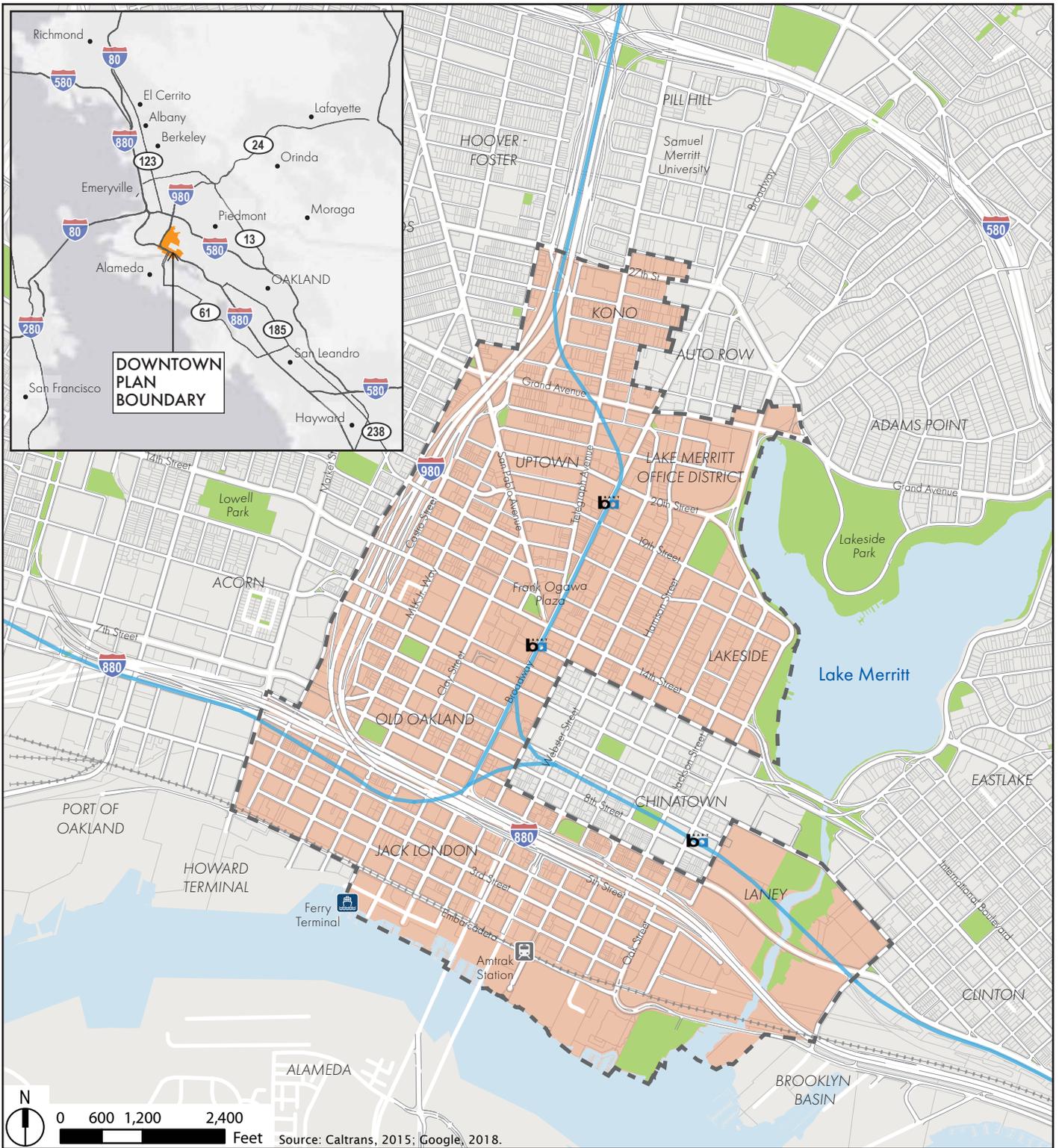
The City Planning Commission will conduct a public scoping hearing on the DEIR for the project on **Wednesday, October 2, 2019**, at 6:00 p.m. in Council Chambers, City Hall, One Frank H. Ogawa Plaza, Oakland, CA 94612.

The City of Oakland is hereby releasing this DEIR, finding it to be accurate and complete and ready for public review. Members of the public are invited to comment on the DEIR and the project. There is no fee for commenting, and all comments received will be considered by the City prior to finalizing the DEIR and making a decision on the project. Comments on the DEIR should focus on the sufficiency of the DEIR in discussing possible impacts on the physical environment, ways in which potential adverse effects might be minimized, and alternatives to the project in light of the DEIR's purpose to provide useful and accurate information about such factors. Comments may be made at the public hearing described above or in writing. Please address all written comments to Alicia Parker, Planner III, City of Oakland, Department of Planning and Building, Bureau of Planning, 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, CA 94612; (510) 238-3362(phone); (510) 238-6538(fax) or by e-mail at aparker@oaklandca.gov. Comments should be received no later than 4:00 p.m. on October 15, 2019. Please reference case number ER18-020 in all correspondence. If you challenge the environmental document or project in court, you may be limited to raising only those issues raised at the Planning Commission public hearing described above, or in written correspondence received by the Department of Planning and Building on or prior to 4:00 p.m. on October 15, 2019. After all comments are received, a Final EIR (FEIR) will be prepared and the Planning Commission will consider certification of the FEIR and render a decision/make a recommendation on the project at a later meeting date to be scheduled. For further information, please contact Alicia Parker, Planner III at (510) 238-3362 or at aparker@oaklandca.gov

August 30, 2019
File Number: ER18-020


EDWARD MANASSE
City of Oakland
Environmental Review Officer

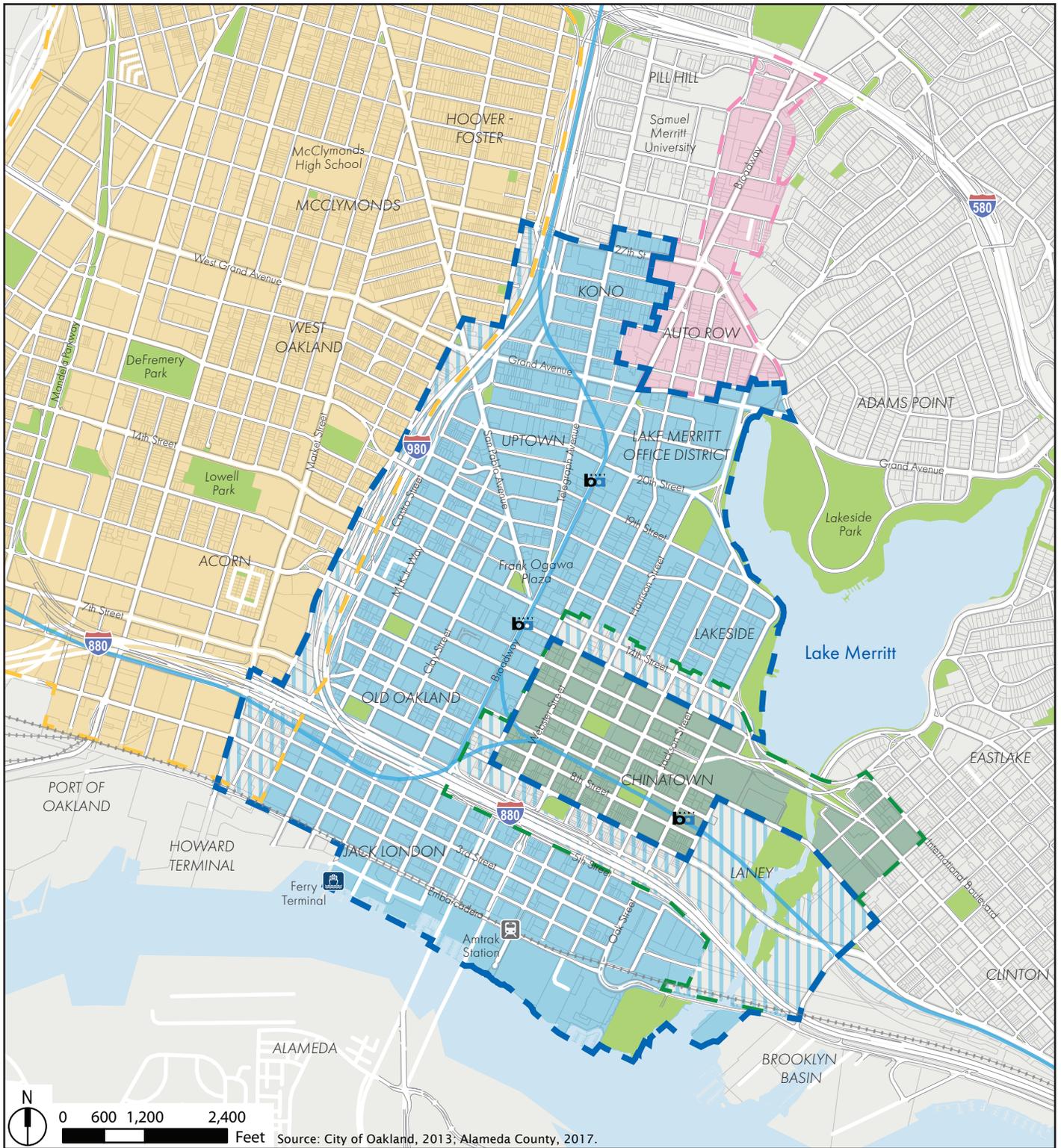
Attachments:
Figure 1: Project Location and Vicinity Map
Figure 2: Plan Area



- Legend**
- Downtown Plan Boundary
 - Parks
 - BART Station
 - BART Line
 - Railroad

Downtown Oakland Specific Plan EIR

Figure 1
Project Location and Vicinity Map



Legend

-  BART Station
-  BART Line
-  Railroad
-  Parks
-  Downtown Oakland Specific Plan Area
-  Lake Merritt Station Area Plan
-  West Oakland Specific Plan Area
-  Broadway-Valdez Specific Plan Area
-  Areas of overlap between Downtown Oakland Specific Plan and other Oakland specific plans

Downtown Oakland Specific Plan EIR

**Figure 2
Plan Area**

DOWNTOWN OAKLAND SPECIFIC PLAN DRAFT ENVIRONMENTAL IMPACT REPORT

State Clearinghouse No. 2019012008

Prepared for the City of Oakland

By:

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With:

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August 2019

The logo for Urban Planning Partners Inc. is a solid orange square containing the text "URBAN PLANNING PARTNERS INC." in white, uppercase, sans-serif font, arranged in four lines.

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I. INTRODUCTION

In compliance with the California Environmental Quality Act (CEQA), this Environmental Impact Report (EIR) provides an assessment of the potential environmental impacts associated with implementation of the Downtown Oakland Specific Plan (the Specific Plan or Plan).¹

CEQA requires that before a decision can be made to approve a project (or in this case, a Specific Plan) that could result in significant adverse physical effects, an EIR must be prepared that describes the environmental effects of the project. This EIR is intended as an informational document that in and of itself does not determine whether the Specific Plan or any component of it will be approved. This EIR is designed to inform City of Oakland staff, Planning Commission, City Council, and other Boards and Commissions; other governmental agencies; and the community about:

1. Potential environmental consequences that can be expected to follow Plan adoption and implementation;
2. Applicable Standard Conditions of Approval (SCAs) and/or mitigation measures necessary to lessen or avoid significant adverse impacts; and
3. A reasonable range of feasible alternatives to the Specific Plan that would lessen or avoid the significant and adverse impacts of the Plan. The information contained in this EIR will be reviewed and considered by public agencies prior to making a decision to approve, reject, or modify the project.

The CEQA Guidelines, Section 15382, define a significant effect on the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” Therefore, in identifying the significant impacts of the Plan (project), the analysis in this EIR concentrates on assessing components of the Plan that would result in changes to the physical environment within the Specific Plan Area and in nearby areas that could be impacted by implementation of the Plan such as Chinatown, other areas of Oakland, and neighboring communities.

¹ The analysis prepared for this EIR is based on the Draft Downtown Specific Plan, dated August 2019.

A. DOWNTOWN OAKLAND SPECIFIC PLAN/PROJECT OVERVIEW

The Specific Plan provides a vision and planning framework for future growth and development in the approximately 930-acre Plan Area. A map of the Specific Plan location within the context of the larger Bay Area is shown in Figure III-1, in *Chapter III, Project Description*. The Specific Plan has been developed through a careful analysis of the Plan Area's economic and environmental conditions, input from City decision-makers, and the community at large. The Plan Area provides a comprehensive vision for the Plan Area over the next 20 years through policy guidance on land use, transportation, housing, economic development, public spaces, cultural arts, and social equity. The Plan serves as a mechanism for ensuring that future development is coordinated and occurs in an orderly and well-planned manner.

The Specific Plan aims to ensure that Downtown Oakland remains a place of continuing growth and revitalization, as well as a valuable resource for the larger Oakland and surrounding community through increased employment, housing, arts, and cultural opportunities. These increased opportunities, which the Specific Plan would achieve through the growth of existing businesses and the creative economy, are important to creating a downtown that serves both current and future residents. Downtown Oakland has become a regional employment center and will continue to become a stronger employment center with the development of the Specific Plan. Supporting existing residents by growing existing businesses and the creative economy is important to creating a plan that serves both current and future residents.

The Specific Plan does not propose specific private developments, but for the purposes of environmental review establishes the Plan Development Program, which represents the *reasonably foreseeable development* expected to occur in the Plan Area over a 20-year planning period. In total, the Downtown Oakland Specific Plan Development Program assumes 29,100 residential units; 20,060,000 square feet of commercial space; 52,600 residents; 60,730 employees; and 16,000 parking spaces. *Chapter III, Project Description*, of this document presents a detailed description of the Plan Area and the elements of the Specific Plan specific to the environmental analysis.

B. ENVIRONMENTAL REVIEW PROCESS

The City of Oakland (City) is the lead agency for the environmental review of the Plan, and as such has made the Draft EIR available for public review for the period identified in the Notice of Availability (NOA) published with this document. During this time, written comments may be submitted to the City Strategic Planning Division at the address indicated on the NOA. Responses to all comments received on the environmental analysis in this Draft EIR during the specified review period will be included in the Response to Comments/Final EIR document, which will be prepared subsequent to the review period.

All supporting technical documents and reference documents are available for public review at the City of Oakland Planning and Building Department, under case file ER18-020/SP-16-001.

CEQA specifies that a program EIR is an appropriate environmental document for a Specific Plan for which there will be future development proposals that are (1) related geographically; (2) logical parts in a chain of contemplated actions, (3) connected as part of continuing program; and (4) carried out under the same authorizing statute or regulatory authority and have similar environmental impacts that can be mitigated in similar ways. A program-level environmental document can provide enough detail to enable an agency to make informed, site-specific environmental decisions within the program. This approach allows agencies the ability to consider program-wide mitigation measures and cumulative impacts that might be utilized in a case-by-case analysis approach, and to carry out an entire program without having to prepare additional site-specific environmental documents. In other cases, the formulation of site-specific issues is unknown until subsequent design occurs, leading to the preparation of later project-level environmental documentation. Preparation of a program-level document simplifies the task of preparing subsequent project-level environmental documents for future projects under the Specific Plan for which the details are currently unknown. Streamlining documents, such as addendums, may be used if only minor technical changes or additions are necessary and do not have to be circulated for public review, which shortens the environmental review process.

The City published and circulated a Notice of Preparation (NOP) for the Specific Plan on January 4, 2019. As stated in the NOP, the City accepted comments regarding the scope of this EIR until February 11, 2019—nine days longer than the 30 days required by the CEQA Guidelines. At the request of the public, the comment period was extended an additional 10 days to February 21, 2019 for a total comment period of 49 days. The NOP was sent to governmental agencies, organizations, and persons who may have an interest in the Specific Plan. A copy of the NOP was also sent to the State Clearinghouse.

Several scoping meetings were held to explain the environmental review process for the Specific Plan and to provide opportunity to take public comment related to the scope of the Specific Plan's environmental review. The scoping meetings were held before the Landmarks Preservation Advisory Board on February 4, 2019 and before the Planning Commission on February 6, 2019 and February 20, 2019.

The City received comments in response to the NOP from governmental agencies, organizations, and interested individuals. A summary of the comments received is provided in *Chapter II, Summary*. The comments related to the scope of the environmental/CEQA analysis were considered as this EIR was prepared. Comments related to the merits of the Specific Plan will be considered by the City independent of this EIR. Once the Draft EIR has been published, the public will have an opportunity to comment on the Draft EIR for a minimum of 45 days. The contents of the Final EIR will include comments and recommendations received on the Draft EIR either

verbatim or in summary; a list of persons, organizations, and public agencies commenting on the Draft EIR; the responses of the Lead Agency to significant environmental points raised in the review and consultation process; and other information added by the Lead Agency.

C. SCOPE OF ANALYSIS

The analysis of this EIR focuses on assessing what adverse impacts implementation of the Specific Plan and build-out and its associated development would have on areas within and adjacent to the Specific Plan. Throughout the planning process and EIR scoping period, the Chinatown community has continually expressed concerns about the impacts of the Plan on Chinatown. The potential impacts on Chinatown are considered in this EIR analysis. As an example, the analysis considers how the effects of the new development could potentially impact neighborhoods adjacent to the Plan Area, including Chinatown and West Oakland. The analysis also considers how new development in the Plan Area may affect resources (protected under CEQA) within and adjacent to the Plan Area such as historic resources. To summarize, this EIR studies the impacts that implementation of the Plan and its associated development would have on: 1) all areas surrounding the Plan Area (i.e., Chinatown, Estuary, West Oakland), and 2) areas within the Plan Area, for the following (as applicable to each environmental topic):

- **Plan and Associated Development + Existing Conditions (as of December 2018)** considering both construction and operational impacts.
- **Plan and Associated Development + Existing Conditions (as of December 2018) + Approved and Planned Development** considering both construction and operational impacts.

Additionally, it is noted that the Plan discusses a potential freeway conversion of I-980 south of Grand Avenue as a transformative idea for future study. The conversion of the freeway is not studied in this EIR. Additional environmental review would be required independent of this EIR as part of future studies.

The following environmental topics are addressed in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures*:

- A. Land Use and Planning
- B. Traffic and Transportation
- C. Air Quality
- D. Greenhouse Gas Emissions
- E. Cultural and Historic Resources
- F. Aesthetics
- G. Biological Resources
- H. Geology and Soils

- I. Hazards and Hazardous Materials
- J. Hydrology and Water Quality
- K. Noise
- L. Population and Housing
- M. Public Services, Facilities, and Recreation
- N. Utilities

Chapter VI, Effects Found Not to be Significant or Less Than Significant or Less Than Significant with Standard Conditions of Approval, includes a brief analysis of each environmental topic for which effects from the Plan were found to be either not significant or less than significant through the scoping process and preliminary review. These topics include: Agriculture and Forest Resources; Energy; Mineral Resources, and Tribal Cultural Resources.

A reasonable range of alternatives to the project, including the CEQA-mandated No Project Alternative and other potential alternatives that might reduce or avoid potential significant environmental effects, are also considered in this EIR.

D. REPORT ORGANIZATION

This EIR is organized into the following chapters:

Chapter I – Introduction: Discusses the overall EIR purpose; provides a summary of the project; describes the EIR scope; and summarizes the organization of this EIR.

Chapter II – Summary: Summarizes the impacts that would result from implementation of the project and describes the SCAs and mitigation measures recommended to avoid or reduce significant impacts.

Chapter III – Project Description: Describes the Plan in the context of CEQA and includes project objectives, describes physical changes that are anticipated as a result of the Plan including land use character, development intensity, circulation and transit, public realm and historic resources. The required approval process is also described.

Chapter IV – Policy: Evaluates the project’s consistency with applicable planning documents, such as the General Plan, and identifies potential conflicts.

Chapter V – Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures: Provides an analysis of each environmental technical topic including: existing conditions (setting); SCAs; significance criteria; potential environmental impacts and their level of significance; SCAs relied upon to ensure that significant impacts would not occur; and mitigation measures recommended when necessary to mitigate identified impacts. Cumulative impacts are also discussed in each

technical topic section. Potential adverse impacts are identified by levels of significance as follows: less-than-significant impact (LTS), significant impact (S), and significant and unavoidable impact (SU). The significance level is identified for each impact before and after implementation of the recommended mitigation measure(s).

CEQA requires the analysis of potential adverse effects of the project on the environment. Generally, potential effects of the environment on the project are **not** legally required to be analyzed or mitigated under CEQA. Nevertheless, in some instances this document analyzes the potential effects of the environment on the project in order to provide information to the public and decision-makers. Where a potential significant effect of the environment on the project is identified, the document, as appropriate, identifies City SCAs and/or project-specific, non-CEQA recommendations to address these issues.

Chapter VI – Effects Found Not to be Significant or Less Than Significant with Standard Conditions of Approval: Provides a brief analysis of the topic areas found through the NOP scoping process and preliminary analysis to have no or less-than-significant environmental impacts with or without implementation of the City's SCAs. These topic areas are as follows: Agriculture and Forest Resources; Energy; Tribal Cultural Resources; and Mineral Resources.

Chapter VII – Alternatives: Considers three alternatives to the Draft Specific Plan/project. The alternatives are included to meet the CEQA requirement that an EIR consider a range of reasonable alternatives to the "proposed project" that would feasibly attain most of the basic objectives of the project, but that would avoid or substantially lessen any of the significant effects of the project. The CEQA alternatives include the No Project Alternative, the Partially Mitigated Alternative, and the Reduced Office Alternative.

Chapter VIII – CEQA-Required Assessment Conclusions: Provides the required analysis of growth-inducing impacts, significant irreversible changes, significant and unavoidable impacts, and cumulative impacts. Effects found not to be significant are discussed in *Chapter V*, as noted above.

Chapter IX – List of Preparers and References: Identifies the preparers of this EIR, references used, and persons and organizations contacted.

Appendices: The appendices include the NOP and written comments received in response to the NOP; and technical analyses and data for transportation and air quality, greenhouse gas emissions, noise, the water supply assessment from East Bay Municipal Utility District, and a historic resources typology.

II. SUMMARY

This EIR evaluates the potential impacts of the proposed Downtown Oakland Specific Plan (Specific Plan or Plan).¹ The Specific Plan is intended to be adopted concurrently with General Plan and Planning Code amendments, and any identified revisions to the City's Standard Conditions of Approval (SCAs). The Specific Plan was developed in response to policy direction provided by the City Council and the Planning Commission, as well as community feedback obtained through an extensive public participation and outreach program, including newsletters, community workshops, and public meetings from 2015 to present. The City of Oakland is the lead agency for this EIR as defined by CEQA. As the lead agency, the City is required to evaluate the potential effects of the Specific Plan in an EIR.

An EIR is intended to inform decision-makers and the general public of the potential significant environmental impacts of a proposed project. The EIR also identifies mitigation measures to minimize significant impacts and evaluates reasonable alternatives to the Specific Plan that may reduce or avoid one or more significant environmental effects. These alternatives must include a "No Project" alternative that represents the result of not implementing the Specific Plan, as well as a range of reasonable alternatives to the Specific Plan which would feasibly attain most of the basic objectives but would avoid or substantially lessen any of the significant effects of the project. Based on the alternatives analysis, an environmentally superior alternative is identified.

This EIR examines the potential effects of implementing designated land uses and policies in the Specific Plan. The impact assessment evaluates the Specific Plan as a whole and identifies the broad, regional effects that may occur with its implementation. Future development projects described in the Specific Plan may be subject to individual, site-specific environmental review as required by State law.

A. OVERVIEW OF DOWNTOWN OAKLAND SPECIFIC PLAN

The Specific Plan covers a certain geographic area in the center of Oakland and west of Lake Merritt. Oakland is located in the East Bay across from San Francisco and south of both Emeryville and Berkeley. The Downtown Specific Plan Area (Plan Area) is generally bounded by 27th Street to the north, I-980 and Brush Street to the west, the Jack London estuary waterfront to the south, and Lake Merritt, Channel and 5th Avenue to the east.

¹ The analysis prepared for this EIR is based on the Draft Downtown Specific Plan, dated August 2019.

The Specific Plan provides an overall vision and planning framework for future growth and development in Downtown Oakland with recommendations for key investments into downtown's transit assets and public realm, along with intensification of downtown's development potential, and priority office areas that will transform downtown into a regional employment center. Diversity, equity, and inclusivity are integral threads in Oakland's ongoing discussions about its community values. The Plan identifies a shared community vision for downtown that prioritizes the need of all Oaklanders.

The Specific Plan identifies the following goals:

- **Goal 1:** Create opportunities for economic growth and security for all Oaklanders.
- **Goal 2:** Ensure sufficient housing is built and retained to meet the varied needs of current and future residents.
- **Goal 3:** Make Downtown's streets comfortable, safe, and inviting and improve connections to the city as a whole so that everyone has efficient and reliable access to downtown's jobs and services.
- **Goal 4:** Encourage diverse voices and forms of expression to flourish.
- **Goal 5:** Provide vibrant public spaces and a healthy environment that improve the quality of life downtown today and for generations to come.
- **Goal 6:** Develop downtown in a way that contributes to community needs and preserves Oakland's unique character.

The Plan includes vision and goals, outcomes, policies, and implementation measures to achieve the identified goals and desired outcomes. A projected development program that represents the reasonably foreseeable development expected to occur in the Plan Area over the next 20 years is detailed in the Plan. In total, the Specific Plan Development Program includes 20,060,000 square feet of total commercial square footage; 29,100 residential units; 16,000 parking spaces; and 60,730 new jobs (see Table III-5 and Table III-6 in *Chapter III, Project Description*.)

B. SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, AND MITIGATION MEASURES

The analysis of the EIR focuses on assessing what adverse impacts implementation of the Specific Plan and buildout and its associated development would have on areas within and adjacent to the Specific Plan. As an example, the analysis considers how the effects of the new development could potentially impact neighborhoods adjacent to the Plan Area including Chinatown and West Oakland. The analysis also considers how new development in the Plan Area may affect resources (protected under CEQA) within and adjacent to the Plan Area such as historic resources. To summarize, this EIR studies the impacts that implementation of the Plan and its associated

development would have on 1) all areas surrounding the Plan Area (i.e., Chinatown, Estuary, West Oakland), and 2) areas within the Plan Area, for the following (as applicable to each environmental topic):

- **Plan and Associated Development + Existing Conditions (as of December 2018)** considering both construction and operational impacts.
- **Plan and Associated Development + Existing Conditions (as of December 2018) + Approved and Planned Development** considering both construction and operational impacts.

Table II-1 presents a summary of the Specific Plan impacts identified in this EIR. The City's SCAs are incorporated into projects as conditions of approval, regardless of a project's environmental determination. As applicable, the SCAs are designed to, and would, substantially mitigate environmental effects of specific projects or actions under the Specific Plan. If an SCA would reduce a potentially significant impact to less than significant, the impact is determined to be less than significant and no mitigation is recommended. In some cases, the Specific Plan includes policies designed to avoid or minimize impacts. Where these policies are needed to minimize a significant impact or to reduce the impact to a less-than-significant level, these policies are also listed. The level of significance is determined by comparing the impact to the significance thresholds described in *Sections V.A through V.N*.

The categories used to designate impact significance are described as follows:

- **No Impact.** A no impact conclusion is reached if there is no potential for impacts or the environmental resource does not occur within the Plan Area or the area of potential effects.
- **Less-than-Significant Impact.** This determination applies if the impact does not exceed the defined significance criteria or would be eliminated or reduced to a less-than-significant level through compliance with existing local, state, and federal laws and regulations. No mitigation is required for impacts determined to be less than significant.
- **Less-than-Significant Impact with Mitigation.** This determination applies if the Specific Plan would result in a significant effect, exceeding the established significance criteria, but feasible mitigation is available that would reduce the impact to a less-than-significant level.
- **Significant and Unavoidable Impact with Mitigation.** This determination applies if the Specific Plan would result in an adverse effect that exceeds the established significance criteria, and although feasible mitigation might lessen the impact, the residual effect would remain significant, and, therefore, the impact would be unavoidable.
- **Significant and Unavoidable Impact.** This determination applies if the Specific Plan would result in an adverse effect that exceeds the established significance criteria, and there is no feasible mitigation available to reduce the impact to a less-than-significant level. Therefore, the residual impact would be significant and unavoidable.

C. ALTERNATIVES

Chapter VII, Effects Found Not to be Significant or Less Than Significant with Standard Conditions of Approval, presents a detailed analysis of a range of reasonable alternatives to the Specific Plan. The alternatives that are analyzed in detail or discussed in this EIR are listed below:

- No Project Alternative 1: Under this alternative, the Specific Plan would not be adopted, and therefore the Specific Plan would not occur. However, the No Project Alternative does include reasonably foreseeable development that could occur even without adoption of and development under the Specific Plan.
- Partially Mitigated Alternative 2: Under this alternative, the Plan Area would be developed at a lower intensity throughout the Plan Area, such that all development (both commercial and residential) would be reduced by 25 percent.
- Reduced Office Alternative 3: This alternative analyzes the development program from the January 2019 Preliminary Plan, which includes approximately the same number of residential units with a reduction of 2,814,500 square feet of commercial square footage.

The Partially Mitigated Alternative 2 is identified as the CEQA-required environmentally superior alternative.

D. AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

The following CEQA topics were among those raised in written comments received in response to the Notice of Preparation (NOP) for this EIR (see Appendix A), which was published and circulated on January 4, 2019, and stated during the City's scoping meetings held by the Landmarks Preservation Advisory Board (February 4, 2019), and Planning Commission (February 6, 2019). The purpose of the NOP and scoping meetings were to solicit comments regarding the final scope and content of this EIR. Many of the comments on the NOP were non-CEQA topics related to issues beyond the scope of the analysis in this EIR prepared pursuant to CEQA, listed below as "Outside the Scope of the EIR." In addition, many of these comments were suggestions to revise the specifics of the Plan, listed under "Comments on the Specific Plan." Non-CEQA comments, which will be considered by decision makers, are noted but not addressed in this EIR. NOP comments relevant to the CEQA analysis are listed by environmental topic area, in alphabetical order.

- **General Comments**
 - Study the effects of an alternative with no height limits, higher density, and more office priority sites.
- **Aesthetics**
 - Do not limit building heights and growth potential in order to maintain view corridors.

- **Air Quality**
 - Study the air quality impacts of multiple alternative scales of employment growth.
 - Use conservative threshold for air quality for highly impacted West Oakland Community.
 - Assess consistency with BAAQMD's 2017 Clean Air Plan.
 - Study air quality health impacts on residents within the Plan Area and in West Oakland from both construction and ultimate operation/capacity of Downtown.
 - Study the air quality impacts of public transportation systems including the Transbay Tube.
- **Cultural and Historic Resources**
 - Study strategies that can be employed to create cultural district preservation systems, such as cultural overlays or community non-profits.
 - Analyze how artists, artisans, makers, art spaces, and production areas can be preserved.
 - Protect views of historic buildings and integrity of architectural public spaces.
 - Consider the impacts of increased heights and intensity for the character of historic areas and buildings and APIs, KONO and Old Oakland specifically mentioned.
 - Use transfer of development rights (TDR) or other incentive programs to encourage preservation of historic resources.
 - Consider that new developments near historic resources should be of a smaller scale and have complementary styles, and consider design guidelines to ensure appropriate architecture.
 - Recommend consulting tribes with local heritage as well as lawyers about applicability of State regulations.
- **Geology and Soils**
 - Consider the environmental cleanup sites and create construction soil and groundwater management plans for areas that are contaminated, may be contaminated, or are discovered to be contaminated.
- **Greenhouse Gas Emissions**
 - Consider using a net-zero threshold for GHG emissions.
 - Consider that the GHG Analysis should be consistent with CA Air Resources Board and BAAQMD policies and goals.
- **Hazards and Hazardous Materials**

- Consider the environmental cleanup sites and create construction soil and groundwater management plans for areas that are contaminated, may be contaminated, or are discovered to be contaminated.
- **Hydrology and Water Quality**
 - Require a water supply assessment by East Bay Municipal Utility District, as it is required by state law.
 - Require plumbing for all potable water uses and feasible grey water systems (irrigation, toilets, commercial and industrial uses) separately, so that when recycled water becomes available it can be used.
 - Plan to comply with the regulation that discharges from Wastewater facilities are eliminated by 2036.
 - Require water efficient landscape ordinance for all projects.
 - Replace, rehabilitate, or disconnect all lateral sewer lines.
- **Noise**
 - Consider noise impacts of industry and Heavy Weight Trucking Route on 3rd Street negatively impacting new residential housing and subsequently leading to limitations on industrial economy.
- **Population and Housing**
 - Analyze Plan impacts specifically for people of color, low-income households, and vulnerable groups.
- **Utilities**
 - Require that all sewer lines be replaced, rehabilitated, or shut off.
 - Do not allow any new gas lines, gas appliances, or gas infrastructure.
- **Transportation and Traffic**
 - Study impacts on, optimization for, potential improvements for all public transportation systems including Alameda-Contra Costa Transit District (AC Transit), Bay Area Rapid Transit (BART), Capitol Corridor, and Amtrak.
 - Study parking demand, facilities, and impacts within the Plan Area and adjacent neighborhoods/destinations like Jack London Square.
 - Analyze impacts of Webster Street plans more, including lane reduction for bikes, two-way conversion, and pedestrian safety, and overall impacts to Chinatown.
 - Consider impacts on industrial traffic and vehicular movement.
 - Study impacts on the Alameda Webster and Posey Tubes.

- Study traffic and circulation impacts on Broadway intersections from population and job growth.
- Include a congestion management program Land Use Analysis program.
- Study ways to increase bike connectivity between Alameda and Oakland and analyze the bike plans in relation to the Countywide Bike Network.
- Identify costs, funding sources, responsible parties, and completion dates for all transportation and traffic mitigation measures.
- Analyze all proposed transportation and traffic mitigation measures in relation to all modes of transit.
- Use transportation demand management (TDM) for all road and transit improvements and produce annual TDM monitoring reports.
- Incorporate the Oakland Alameda Access Project in analysis.
- Submit the Draft EIR to Metropolitan Transportation Commission (MTC), Association of Bay Area Governments (ABAG), and Alameda County Transit Commission (ACTC).
- **Project/Plan Merits (non-CEQA)**

In addition, several comments were raised related to the development of the merits of the Plan itself or related to issues beyond the scope of the analysis in this EIR prepared pursuant to CEQA. These comments will be considered independent of the CEQA process and as part of the City's review of the Specific Plan itself.

- Study arts, culture, and diversity as health indicators.
- Study impacts on and displacement of artists, artist spaces, and housing affordable to artists.
- Include a Health Impact Assessment.
- Consider health and social impacts (including demographics, income, employment, housing affordability, etc.), beyond air quality impacts.
- Measure equity measures over the life of the plan.
- Preserve arts and culture, as community and businesses must be part of every aspect of plan.
- Include more strategies for equity and inclusion that are developed and clearly implementable.
- Formalize protected view corridors and account for their preservation in the Plan.
- Require high architectural design in the Arts + Garage District.
- Require 100% building electrification, electric building and appliance standards, and no new gas infrastructure or hookups.
- Integrate arts preservation into all aspects of the plan.

- Include more light industrial zoning.
- Include more affordable studios and spaces, affordable housing, etc.
- Provide incentives for preserving arts and cultural facilities.
- Take out housing on the 3rd Street corridor; it is too close to industrial uses.
- Include more housing growth, possibly increase FAR or remove height limits.
- Study homelessness as part of the Plan.
- Acknowledge that affordable housing is very important for retaining artists in Oakland, do not displace and/or price out artists and artisans and young people.
- Include more incentives for affordable housing production and keeping Oaklanders of low-income levels in the City.
- Do not support extending housing to 25th Street.
- Capitalize on the job-transit connection.
- Plan for bigger/more pedestrian improvements and connect them to growth projections and the Countywide Pedestrian Plan.
- Improve connectivity across freeways, especially 880.
- Preserve 3rd Street as a designated Heavy Truck Route, keep industrial traffic flowing, don't create pedestrian safety issues, and don't negatively impact industrial freight and rail movement.
- Provide less parking.

E. SUMMARY OF IMPACTS TABLE

Table II-1 below presents a summary of the proposed Plan impacts identified in this EIR. The following notations are provided after each identified significant impact and mitigation measure:

SU = Significant and Unavoidable

S = Significant

LTS = Less than Significant

These notations indicate the significance of the impact with and without mitigation.

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
A. Land Use and Planning			
<i>Implementation of the project would not result in any significant land use impacts</i>			
B. Traffic and Transportation			
TRANS-1: The bus-only lanes proposed in the Specific Plan may overlap with the Specific Plan’s proposed low stress bike network potentially generating transportation conflicts between bicycle and transit along corridors where both are proposed.	S	TRANS-1: The Specific Plan shall include an implementation measure that requires the City of Oakland as part of the planning and design process for bicycle or transit improvements to collaborate with AC Transit and other stakeholders to address multimodal impacts on streets and corridors where both low stress bike facilities and bus-only lanes are being considered. that The Plan shall establish the prioritized transportation modes; consider the corridor’s physical characteristics and expected land use; incorporate input from the community; evaluate multi-modal safety, travel markets, transportation and land use compatibility, and stakeholder inputs; and identify. the design features that support the prioritized transportation modes prior to beginning final design.	LTS
TRANS-2: Development under the Specific Plan would generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard.	SU	TRANS-2: The Specific Plan shall include an implantation measure that requires the City of Oakland within the next three years to undertake and complete a Diagnostic Study as outlined in SCA-TRANS-7: Railroad Crossing (#82) to identify and implement the suite of improvements to enhance multi-modal safety along the railroad tracks including the elements necessary for a Quiet Zone through Jack London District. The study shall identify the schedule and potential funding for implementing the suite of improvements resulting from the study and the City as the lead agency would design and construct the improvements. Any proposed improvements must be coordinated with California Public Utility Commission (CPUC) and affected railroads and all necessary permits/approvals obtained, including a GO 88-B Request (Authorization to Alter Highway Rail Crossings).	SU

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
TRANS-3: The development under the Specific Plan would contribute to the significant degradation of several CMP or MTS segments in 2020.	SU	TRANS-3: No other feasible mitigation measures, beyond TDM measures, are available to reduce the effect development under the Specific Plan would have on the adversely affected roadway segments.	SU
Cumulative Impact TRANS-1: Development under the Specific Plan together with cumulative development, would generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard.	SU	Cumulative Mitigation Measure TRANS-1 Implement Impact TRANS-2.	SU
Cumulative Impact TRANS-2: The development under the Specific Plan would degrade from LOS E or better to LOS F or increase the v/c ratio by 0.03 or more for segments at LOS F on the following CMP or MTS segments in 2040.	SU	Cumulative Mitigation Measure TRANS-2: No other feasible mitigation measures, beyond TDM measures, are available to reduce the effect development under the Specific Plan would have on the adversely affected roadway segments.	SU
C. Air Quality			
AIR-1: Operation of some large development projects under the Specific Plan could result in a cumulatively considerable net increase of criteria air pollutants for which the region is in nonattainment.	S	AIR-1: Reduce Operational Emissions. Proposed projects that would exceed the current BAAQMD’s screening criteria for operational criteria air pollutant emissions shall retain a qualified air quality consultant to quantify criteria air pollutant emissions and identify measures, as needed, to reduce the project’s average daily emissions below 54 pounds per day for ROG, NO _x , and PM _{2.5} and 82 pounds per day for PM ₁₀ , and reduce the maximum annual emissions below 10 tons per year for ROG, NO _x , and PM _{2.5} and 15 tons per year for 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. Such measures may include, but are not limited to, the following: <ul style="list-style-type: none"> ▪ For any proposed refrigerated warehouses or large (greater than 20,000 square feet) grocery retailers, provide electrical hook-ups for diesel trucks with Transportation Refrigeration Units at the loading docks. 	SU

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
<ul style="list-style-type: none"> ▪ Use low- and super-compliant VOC architectural coatings in building construction and when maintaining buildings. “Low-VOC” refers to paints that meet the more stringent regulatory limits in South Coast Air Quality Management District Rule 1113; however, many manufacturers have reformulated to levels well below these limits. These are referred to as “Super-Compliant” architectural coatings. ▪ Other measures that are shown to effectively reduce criteria air pollutant emissions on-site or off-site if emissions reductions are realized within the SFBAAB. Measures to reduce emissions on-site are preferable to off-site emissions reductions. <p>The feasibility or effectiveness of Mitigation Measure AIR-1 is unknown at this time. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be conservatively significant and unavoidable with mitigation. It should be noted that the identification of this significant impact does not preclude the finding of future less-than-significant impacts for subsequent projects that comply with applicable screening criteria or meet the City’s significance thresholds for operational emissions of criteria air pollutants.</p>			
D. Greenhouse Gas Emissions			
GHG-1: Construction and operation of development projects under the Specific Plan would generate GHG emissions that could have a significant impact on the environment.	S	GHG-1: Reduce GHG Emissions. Projects to be built before 2030 shall demonstrate compliance with a certified Qualified GHG Reduction Plan (if available) or the 2030 GHG efficiency threshold of 0.61 MTCO ₂ e/SP. Projects to be built between 2030 and 2050 shall demonstrate compliance with a certified Qualified GHG Reduction Plan (if available) or the 2040 GHG efficiency threshold of 0.34 MTCO ₂ e/SP. To demonstrate compliance with the applicable GHG efficiency threshold, the project applicant shall retain a qualified air quality consultant to quantify the project-specific non-transportation GHG emissions and consider implementing the following measures,	LTS

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
		<p>as applicable and feasible, to reduce non-transportation GHG emissions below the GHG efficiency threshold. Such measures may include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ▪ Carbon-Free Energy. 100 percent of electricity purchased shall be from carbon-free sources (e.g., nuclear, renewable, and hydroelectric). ▪ Natural Gas. Fossil natural gas shall not be used in all new or modified buildings. ▪ Alternative Fuels for Diesel-Powered Construction Equipment. All diesel-powered construction equipment shall use renewable diesel fuel that meets California’s Low Carbon Fuel Standards and is certified by CARB Executive Officer. ▪ Energy Efficiency for Multi-Family Residential Buildings. New multi-family residential buildings shall be designed to achieve a 15 percent reduction in grid energy use versus a standard Title 24 code-compliant building by following the energy efficiency performance standards set forth in Tier 2 of the 2016 California Green Building Standards Code, Section A4.203.1.2.1. These reductions shall be achieved by employing energy-efficient design features and/or solar photovoltaics at the time of building permit issuance. ▪ Energy Efficiency of Non-Residential Buildings. Newly constructed non-residential buildings shall be designed to achieve a 10 percent or greater reduction in grid energy use versus a standard Title 24 code-compliant building through energy efficiency measures consistent with Tier 2 of the 2016 California Green Building Standards Code, Section A5.203.1.2.1. Alternatively, this measure can be met by installing on-site renewable energy systems that achieve equivalent reductions in building energy use at the time of building permit issuance. ▪ Outdoor Electrical Receptacles. Electrical receptacles shall be included on the exterior of walls of all newly constructed buildings and accessible for purposes of charging or powering electric landscaping equipment and providing an 	

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
E. Cultural and Historic Resources			
<p>CULT-1: Implementation of the Specific Plan and its associated development is anticipated to result in the demolition, destruction, or relocation of some historical resources either as individual resources and/or as contributors to historic districts.</p>	SU	<p>CULT-1: The following mitigation measures shall be implemented to the extent feasible to minimize impacts to historic resources in the Plan Area and its vicinity. The mitigation measures are identified in order of priority. As many of the measures as feasible shall be implemented:</p> <p>CULT-1A: The Plan shall be revised to include the following implementation measures focused on minimizing impacts to historic resources:</p> <ul style="list-style-type: none"> i. Reinstate and promote the City Downtown Façade Improvement Program consistent with Action 3.8.1(9) of the Historic Preservation Element of the City of Oakland General Plan for both commercial and residential properties including SROs. The program shall require financial contribution to this fund when historical resources are impacted by future development projects in the Plan Area, and potentially the other Specific Plan areas, based on a formula established by the City as part of reinstating the program. If reestablished, the fund shall be used to implement the additional mitigation measures identified below, as appropriate. ii. Revise the City Transfer of Development Rights (TDRs) Ordinance, within three years of Plan adoption, to 	SU

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
		<p>encourage the retention of the smaller-scale buildings that are prevalent in downtown and are at high risk for redevelopment and demolition. The revised ordinance should be accompanied by a specific TDR program for building owners and project sponsors within the Plan area, and potentially the other Specific Plan areas. This program should include identifying potential properties to participate and outreach to these owners so they understand the benefits as well as how this program could fit into a menu of preservation incentives. The transfer enables the owner of the receiving site to develop additional gross floor area, above and beyond what would otherwise be allowed. The use of this program shall be considered into the current height changes proposed downtown. A good model for this program has been on-going in San Francisco.</p> <p>iii. Adopt an Adaptive Reuse Ordinance, within three years of Plan adoption, that would encourage preservation of historic buildings within the Plan Area and potentially the other Specific Plan areas. The City of Los Angeles has a highly successful, similar program adopted in 1999 for downtown that was extended into other areas in 2003 that can serve as a model. Other elements of the ordinance should include a means to expedite project approvals for historic building rehabilitations that would convert vacant or underutilized properties to provide housing, SRO units, live-work units, or cultural activities. It should also delineate which historic buildings in downtown are eligible, with a focus on designated Landmarks, buildings within National Register-listed historic districts, and buildings within APis and ASIs. Provisions could include but not, be limited to reduced permitting costs, ways to accommodate existing floor area ratios, and reduced parking and open space requirements, when necessary to achieve project goals. Other provisions could include expedited review of the use of the California Historical Building Code (CHBC) and ways to encourage</p>	

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
		<p>projects to meet the Secretary of the Interior’s Standards for the Treatment of Historic Properties.</p> <p>iv. Formulate an oral history program for the cultural groups that have played an important role in downtown. Numerous cultural groups and cultural traditions have influenced the development of downtown and its communities. Engage in a public outreach program to formulate a list of groups and stakeholders, key community individuals who can take leadership roles, and develop a program that will inform the oral history project. Partnerships with the Oakland Public Library, Laney College and StoryCorps could bolster this program. The City should strive to be an instigator in this program.</p>	
		<p>CULT-1B: Expand public outreach and implementation of the California Historical Building Code (CHBC) for projects that qualify under State law. Dovetail use of the CHBC with the Adaptive Reuse Ordinance as it is implemented. Provide professional development training to the City’s building officials and inspectors on the use of the CHBC so that they can implement project review for qualified buildings within reasonable timeframes. Appoint a Senior Building Official as the CHBC-liaison between the Planning Department, the Chief Fire Official and the Building Department so that projects are reviewed with consistency and clarity. Encourage City staff to schedule a seminar with the Office of Historic Preservation’s member of the State Historical Safety Board to provide a thorough background of how the code is implemented.</p>	
		<p>CULT-1C: Further the Planning Code protections for SROs hotels with additional façade protections for these buildings, perhaps by deeming this specific historic building type eligible for participation in the Mills Act program or by documenting these resources as a thematic, rather than geographically-based API. While Planning Code Chapter 17.153 Demolition, Conversion and Rehabilitation Regulations for Residential Hotels, was adopted in 2018, and provides some protections,</p>	

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
		<p>additional incentives or protections would further ensure the viability of these resources and mitigate further losses of both their historic use and character.</p>	
		<p>CULT-1D: As part of the implementation of Plan Policy LU-2-4 that revises the City’s Demolition Findings Requirements to facilitate new compatible development near the outer edges of fragmented APIs and ASIs, require tailored design guidelines to help ensure architectural compatibility. The guidelines should illustrate treatments for rehabilitation of the historic commercial buildings typical in these historic districts, as well as provide strategies for new construction both within and on the immediate periphery or edge of these significant areas. New construction in these areas should take into consideration the historic parcel pattern; assembling lots and creating bulkier building footprints changes the character of the street rhythm. These guidelines will help mitigate the impacts of future development on these sensitive areas of downtown. A strong example for this mitigation is the Historic Downtown Los Angeles Design Guidelines completed in July 2002 by the Los Angeles Conservancy and three downtown Business Improvement Districts (BIDs).</p>	
		<p>CULT-1E: The City shall also consider incorporating the following additional mitigation measures as implementation policies or guidelines in the Plan prior to its adoption, although these have a lower priority than Mitigation Measures CULT-1A – CULT-1D.</p> <ul style="list-style-type: none"> i. Study the feasibility of raising the Mills Act tax loss limits for properties within the Specific Plan, Lake Merritt Station Area Plan and Broadway Valdez Specific Plan boundaries, which would encourage more participation in the program. Currently, Oakland has six Mills Act properties within the Plan Area. ii. Provide City support of efforts at the State level to create a State Historic Tax Credit. This could take the form of proactive encouragement of state legislation that would enact 	

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
		the tax credit.	
		<p>iii. Update the Oakland Cultural Heritage Survey and as part of that effort include elements that focus on: (1) Downtown’s built environment associated with the Modern Movement or the Recent Past to determine methods to more completely understand the types of resources present and their historic significance. This could take the form of a funded Historic Context Statement for Modern Buildings and Landscapes in downtown or a site-specific survey of resources built between 1940 and 1975; and/or a focused review of the banking cluster near the Lake Merritt office district, venues related to food and entertainment, mid-century courtyard apartments, as well as older commercial buildings in downtown that may have been remodeled to reflect the Modern aesthetic. In recent years, Sacramento, San Francisco, Fresno and Pasadena have invested in this type of preservation planning tool with great success and community interest. Downtown’s streetscape includes historic parks that are used to determine methods to more completely understand the types of resources present along the streetscape and in downtown’s parks. This could take the form of a funded Cultural Landscape Inventory to document and categorize resources. Good models for this are the City of San Francisco Civic Center Cultural Landscape Inventory and the Market Street Cultural Landscape Inventory.</p>	
		<p>iv. As part of any redevelopment or expansion of the Laney College Campus, require that a full historic resources evaluation be conducted as well as any properties slated for redevelopment around the College to fully understand the potential historic resources associated with this educational institution and to understand the significance of the campus within the body of work of Skidmore, Owings & Merrill.</p>	
		<p>v. Prepare and implement an interpretive program of</p>	

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
		<p>signage within the Webster Green in Jack London Square to inform users of this new greenway of the historic industrial character of the surrounding urban fabric. This could be an extension of the signage already present in the Waterfront Warehouse District.</p>	
		<p>CULT-1F: Independent of the Specific Plan, the City shall consider the following measures:</p> <ul style="list-style-type: none"> i. Promote graffiti abatement by including additional abatement trips. Currently, only one “courtesy” abatement trip can be scheduled for private property, due to City staffing issues. Extend this to additional abatement trips, per year, within the Specific Plan area boundary. Further, prioritize graffiti abatement in the Specific Plan Area within the Public Realm, especially on prominent historic buildings. Additionally, understand that sometimes graffiti can acquire a cultural significance as well and encourage a graffiti arts program with partner building owners to engage local artists and deter graffiti. Also, raise awareness of non-destructive graffiti abatement methods so historic materials like brick and terra cotta aren’t destroyed. ii. Improve vacant building security through partnerships with the Planning, Building and Police Departments to collaborate on maintaining a list of vacant buildings so that Police Officers know which buildings might be at risk of vandalism or other illegal activity. This would mean an investment in a vacant building inventory in the Specific Plan area. iii. Maintain a list of vacant parcels to assist with building relocation assistance. Additionally, a relocation fund could be established and paid into by projects that demolish historic resources. This could result in the salvage of stand-alone historic resources, especially smaller resources that sit on large lots, which face fierce development pressure. This is more appropriate in areas that are not considered historic 	

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
	SU	<p>districts or groupings of buildings. This can be facilitated via CEQA review by making known Historic Preservation Element Action 3.8.1.2, allowing buildings to be moved to a location consistent with its historic or architectural character.</p> <p>iv. Study the feasibility of amending the Downtown Oakland National Register Historic District to provide a means for more property owners to use the Federal Rehabilitation Tax Credits. The amendment should evaluate an extended boundary and additional contributors, to include more of downtown’s significant historic buildings. This would provide a means for more property owners to use the Federal Rehabilitation Tax Credit as owners of resources within a National Register-listed historic district.</p> <p>Implementation of Mitigation Measures CULT-1A – CULT-1F would lessen this impact but it would remain significant and unavoidable.</p>	SU
<p>CULT-2: Alterations to Historic Buildings that could occur under the Specific Plan could change the significance and character of historic resources as a result of the Specific Plan.</p>	SU	<p>CULT-2: Implement Mitigation Measures CULT-1A – CULT-1F.</p>	SU
<p>Cumulative Impact CULT-1: Implementation of the Specific Plan and its associated development, combined with cumulative development in the Plan Area and citywide, including past, present, existing, approved, pending, and reasonably foreseeable future development, would contribute to a significant and unavoidable adverse cumulative impact to cultural and historical resources.</p>	SU	<p>Cumulative Impact CULT-1: Implement Mitigation Measures CULT-1A – CULT-1F.</p>	SU
F. Aesthetics			
<p>AES-1: Shadow. Implementation of the Downtown Specific Plan and development that may occur under the Plan may result in substantial new shadow that would shade solar collectors, passive solar heaters, public open space, or historic resources, or otherwise result in inadequate</p>	SU	<p>AES-1: Shadow. To help ensure shadows associated with new development under the Plan are lessened, the City shall adopt a new SCA or incorporate a policy into the Specific Plan that requires project sponsors, on a project-by-project basis to complete a site-specific shadow evaluation at the time that</p>	SU

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
provision of adequate light.		<p>individual projects are proposed if any of the following conditions exist:</p> <ul style="list-style-type: none"> ▪ At or adjacent to buildings and structures that meet the definition of "historical resources" contained in Section 15064.5 of the CEQA Guidelines ▪ At or adjacent to a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors ▪ At or adjacent to a public or quasi-public park, lawn, garden or other open space <p>If a shadow study is required it shall address the following:</p> <ul style="list-style-type: none"> ▪ If at or adjacent to historic building; an evaluation of how shadow would affect the building or structure which confirm to the <i>Secretary of Interior's Standards of Historic Properties and Guidelines for Preserving, Rehabilitation, Restoring and Reconstructing Historic Buildings (1995)</i>. The <i>Standards</i> require the preservation of character defining features which convey a building's historical significance, and offers guidance about appropriate and compatible alterations to such structures. This evaluation should be carried out by a professional who meets the Secretary of the Interior's Standards for Architectural History. The results of the evaluation shall be submitted as a Historic Architectural Assessment Report to the City of Oakland. Once the report is reviewed and approved by the City, a copy of the report shall be submitted to the Northwest Information Center (NWIC). ▪ If at or adjacent to a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors an evaluation of how shadow would affect the productivity of the solar units (in terms of how much of the year solar collectors are shaded and what portion of the solar units are shaded). ▪ If at or adjacent to a public or quasi-public park, lawn, garden, or open space, an evaluation of how shadow would impact the beneficial use (in terms of how much of the year 	

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
<p>AES-2: Wind Analysis. Implementation of the Downtown Specific Plan and development that may occur under the Plan may result in adverse wind conditions.</p>	SU	<p>the public or quasi-public park, lawn, garden, open space would be shaded and what portion of the year it is shaded.</p> <p>The shadow evaluation or Report (if historic building) shall be provided as part of the development approval submittal and the project sponsor shall modify the building design and placement to reduce impacts to the extent feasible. If none of the above conditions are applicable to the project, the project sponsor shall provide documentation to demonstrate such conditions do not exist.</p> <p>Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years are conservatively deemed significant and unavoidable related to shadows.</p> <p>AES-2: Wind Analysis. Project sponsors proposing buildings 100 feet tall or taller within the entire Plan Area boundary shall conduct a detailed wind study to evaluate the effects of the project. The current definition of downtown within the CEQA Thresholds of Significance defines it as bounded by West Grand Avenue to the North, Lake Merritt and Channel Park to the east, and Oakland Estuary to the south and I-980/Brush street to the west. If the wind study determined that the project would create winds exceeding 36 miles mph for more than one hour during daylight hours during the year, the project sponsor would incorporate, if feasible, measures to reduce such effects, as necessary, until a revised wind analysis demonstrates that the proposed project would not create winds in excess of this threshold. Examples of measures that such projects may incorporate, depending on the site-specific conditions, include structural and landscape design features and modified tower designs: wind protective structures or other apparatus to redirect downwash winds from tall buildings, tree plantings or dense bamboo plantings, arbors, canopies, lattice fencing, etc. It is also noted that the City’s threshold is very stringent. The</p>	SU

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
Cumulative AES-1: Implementation of the Downtown Specific Plan and development that may occur under the Plan may, in combination with other past, present, and reasonably foreseeable future projects within and around the Plan Area, result in significant cumulative wind and shadow impacts.	SU	City may modify this threshold in the future and if it does, it would be applicable to the Specific Plan Area; however, it is possible that a significant and unavoidable impact may still occur. At this time, however, there are not sufficient details available to analyze specific impacts and it cannot be known with certainty that a project redesign would eliminate the potential for new adverse wind impacts. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be conservatively deemed significant and unavoidable related to wind. Cumulative AES-1: Implement Mitigation Measures AES-1 and AES-2.	SU
G. Biological Resources			
<i>No significant impacts related to biology would occur with implementation of the City's SCA's</i>			
H. Geology and Soils			
<i>No significant impacts related to geology and soils would occur with implementation of the City's SCA's.</i>			
I. Hazards and Hazardous Materials			
<i>No significant impacts related to hazards and hazardous materials would occur with implementation of the City's SCA's.</i>			
J. Hydrology and Water Quality			
<i>No significant impacts related to hydrology and water quality would occur with implementation of the City's SCA's.</i>			
K. Noise			
<i>No significant impacts related to noise would occur with implementation of the City's SCA's.</i>			

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
L. Population and Housing			
<i>No significant impacts related to population and housing would occur with implementation of the City's SCA's.</i>			
M. Public Services, Facilities, and Recreation			
PUB-1: Development under the Specific Plan could increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of that facility would occur or be accelerated, or would require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.	S	PUB-1: Part 1) Requires the city to update the Capital Improvements Impact fees, and/or implement a dedicated impact fee specific to parks and recreation that is independent of the Capital Improvements Fee. Part 2) Requires the city to create a Privately Owned Public Spaces (POPOS) program so that outdoor and indoor spaces can be provided for public enjoyment by private owners in exchange for bonus floor area or waivers.	LTS
Cumulative PUB-1: Development under the Specific Plan, and reasonably foreseeable future projects could increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of that facility would occur or be accelerated, or would require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.	S	Cumulative PUB-1: Implement Mitigation Measure PUB-1	LTS
N. Utilities			
UTL-1: The City's stormwater collection system is aging and will require improvements to continue to serve the development in the downtown area that may occur in association with the Specific Plan.	S	UTL-1: Part 1) The City of Oakland shall adopt a new SCA and/or revise existing SCA/s that includes the following: New development as a result of the implementation of the Specific Plan shall determine the adequacy and condition of the existing storm drainage infrastructure impacted by the project. The project watershed shall be analyzed for post-construction impacts to drainage within the watershed, accounting for the condition of the existing infrastructure. For any identified adverse impacts, mitigation measures shall be proposed and implemented as part of the project. Part 2) All future projects under the Specific Plan shall require the installation of full trash capture device at priority storm drain inlets	LTS

TABLE II-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impacts	Level of Significance Before Mitigation Measure	Mitigation Measure	Level of Significance with Mitigation Measure
<p>Cumulative UTL-1: The City’s stormwater collection system is aging and will require improvements to continue to serve the development in the downtown area that may occur in association with the Specific Plan, and reasonably foreseeable future projects within and around the Plan Area, resulting in significant cumulative stormwater impacts.</p>	S	<p>in the project area and within a 100-foot buffer around the project boundary. Part 3) Establish a dedicated impact fee specific to stormwater to address the aging system that is in addition to the citywide Capital Improvements Fee. Recommended fees should be calculated by square footage.</p>	LTS

III. PROJECT DESCRIPTION

This chapter describes the Draft Downtown Oakland Specific Plan (Specific Plan or Plan), which is the “California Environmental Quality Act (CEQA) project” evaluated in this EIR. The chapter summarizes the purpose and mandated content of Specific Plans under State law, the adopted Specific Plans within close proximity, including the Broadway Valdez Specific Plan (BVDSF), the Lake Merritt Station Area Plan (LMSAP), and the West Oakland Specific Plan (WOSP). The purpose, goals, objectives, outcomes, and key characteristics of the Plan are also described, along with the approvals necessary to implement it.

The Specific Plan presents a unified, cohesive, and broadly construed array of policies, strategies, and changes to regulations and physical projects for the purpose of creating a desired future growth and development framework. Many policies and proposed actions in the Plan are not related to an analysis of potentially adverse environmental impacts as required under CEQA. As such, the information presented and described in this chapter more narrowly focuses on aspects of the plan that are pertinent to the potential environmental effects.

A. OVERVIEW

1. Plan Vision

The Specific Plan provides an overall vision and planning framework for future growth and development in Downtown Oakland, with recommendations for key investments into downtown’s transit assets and public realm, along with intensification of downtown’s development potential, and priority office areas that will help maintain downtown as a regional employment center and central business district of the East Bay. Diversity, equity, and inclusivity are integral threads in Oakland’s ongoing discussions about its community values. The Plan describes a shared community vision for downtown that prioritizes the need of all Oaklanders.

The Specific Plan’s equity framework is also an integral part of the Plan with a primary goal to reduce racial disparities and displacement (consistent with the Land Use and Transportation Element’s (LUTE’s) discussion on social, economic, and environmental sustainability and its aim to “assure the fair treatment of people of all races, cultures, incomes, and educational levels with respect to development, implementation, and enforcement of laws, regulations and polices.” The equity framework sets forth six key issue areas:

- Economic opportunity,
- Housing affordability,

- Mobility and connectivity,
- Culture keeping,
- Community health, and
- Land use and urban form.

Within these issue areas, many policies, strategies, actions, and outcomes are presented in order to reduce racial and social disparities and foster more fair and equitable access to opportunities. Several significant disparities are identified, including housing cost burden, unemployment, median income, and disconnected youth.¹

B. LOCATION

The Specific Plan defines a certain geographic area in the center of Oakland west of Lake Merritt. Oakland is in the East Bay across from San Francisco and south of both Emeryville and Berkeley as shown in Figure III-1. The Plan Area is generally bounded by 27th Street to the north, I-980 and Brush Street to the west, the Jack London estuary waterfront to the south, and Lake Merritt, and Channel and 5th Avenue to the east, as shown in Figure III-2. The Plan Area is surrounded by several other planning areas including the BVDSP to the north, the LMSAP to the east, and the WOSP to the west, also shown in Figure III-2. Altogether the Plan Area includes approximately 930 acres. The Plan Area consists of ten planning sub-areas as described below and shown in Figure III-3:

1. **Central Core**, bounded by 14th/16th/17th Street to the north, Harrison Street to the east, Martin Luther King Jr. Way to the west, 10th Street to the south;
2. **Lake Merritt Office District**, bound by West Grand Avenue to the north, Broadway to the west, 17th Street to the south, and Harrison Street to the east;
3. **Uptown**, generally bound by 27th Street to the north, Telegraph and San Pablo Avenue to the west, 17th Street to the south, and Broadway to the east;
4. **Koreatown/Northgate**, bound by 27th Street to the north, I-980 to the west, West Grand Avenue to the south, and Telegraph Avenue to the east;
5. **West of San Pablo**, generally bound by San Pablo Avenue to the north and east, I-980 to the west, and 14th and 16th Street to the south;
6. **Lakeside**, bound by Lakeside Drive and Lake Merritt to the north and east, Harrison Street to the west, and 14th street to the south;

¹ Teenagers and young adults between the ages of 16 and 24 who are neither working nor in school.



- Legend**
- Downtown Plan Boundary
 - Parks
 - BART Station
 - BART Line
 - Railroad

Downtown Oakland Specific Plan EIR

Figure III-1
Project Location and Vicinity Map

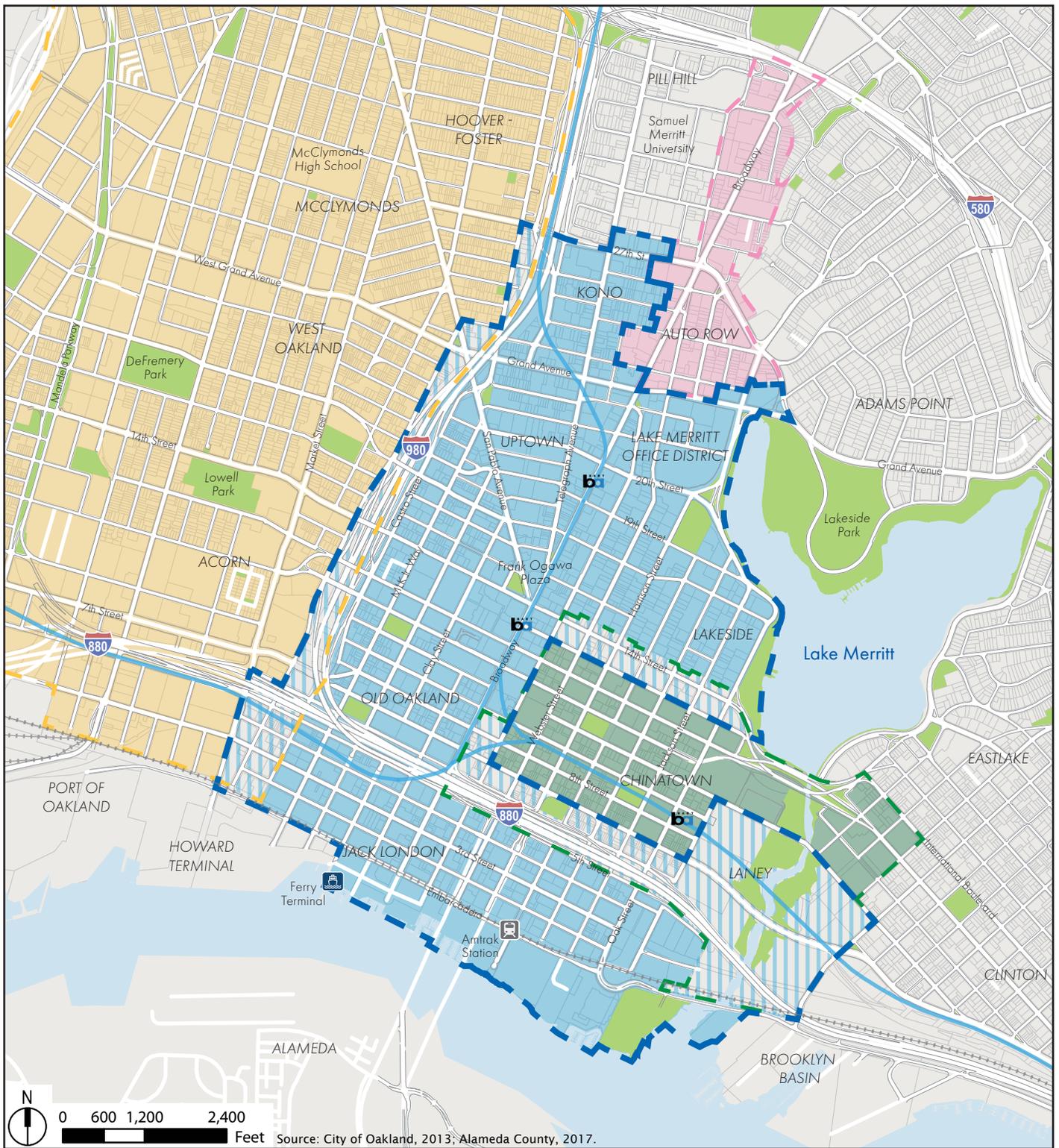
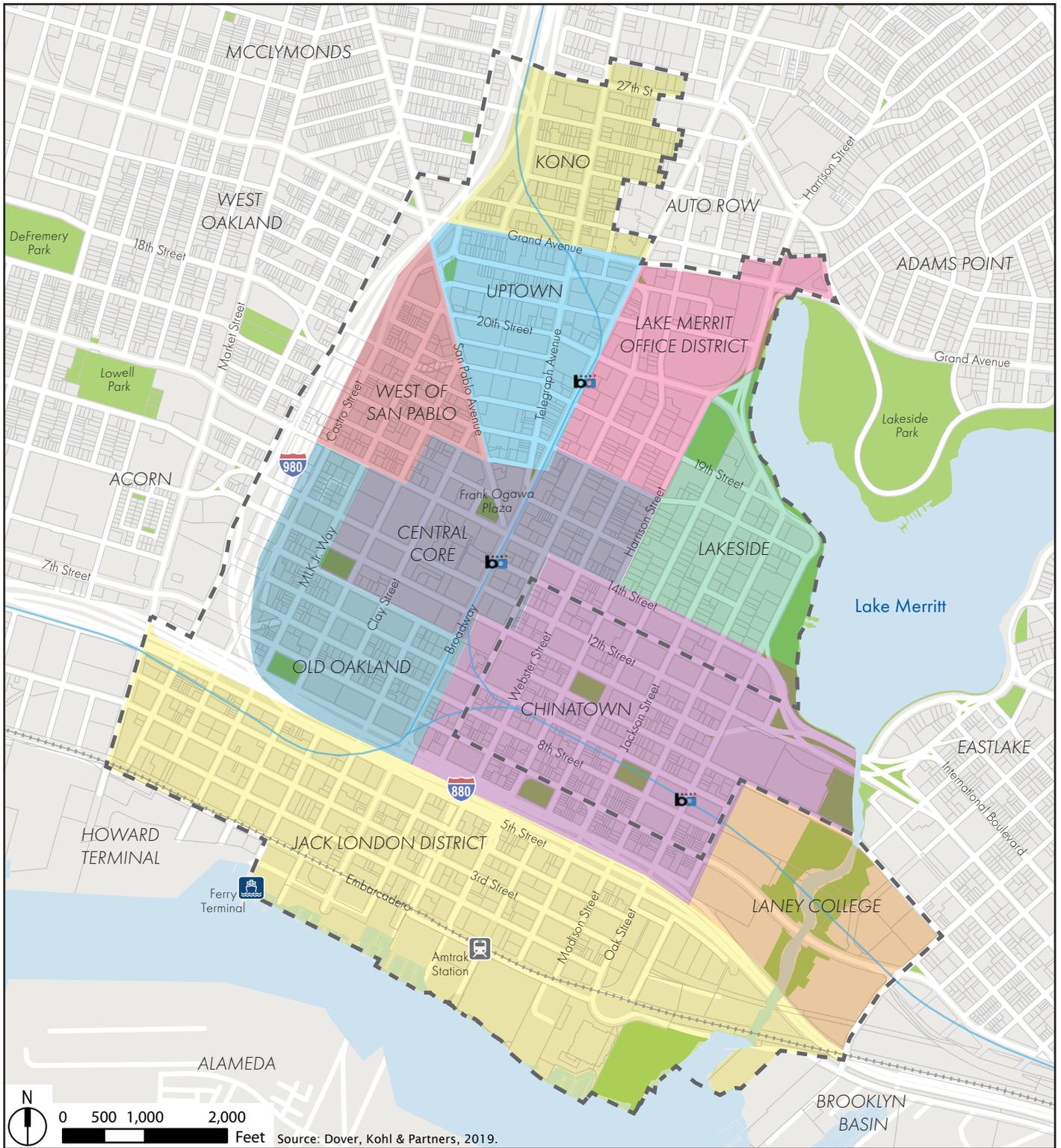


Figure III-2
Plan Area and Adjacent Plan Areas



Legend

- Downtown Plan Boundary
- Parks
- BART Station
- BART Line
- Railroad

Downtown Oakland Specific Plan EIR

**Figure III-3
Planning Sub-Areas Map**

7. **Old Oakland**, generally bound by 14th/11th/10th Street to the north, I-980 to the west, I-880 to the south, and Broadway to the east;
8. **Chinatown**, generally defined by 13th Street to the north, Franklin Street to the west, 7th Street to the south, and Fallon Street to the east;
9. **Jack London District**, which is bound by I-880 to the north, Brush Street to the west, the Oakland Estuary to the south, and the Lake Merritt Channel to the east; 10th and 11th Street, to the east, and Franklin and Harrison Street to the east; and
10. **Laney College**, generally defined by 10th Street to the north, Fallon Street to the west, I-880 to the south, and 5th Avenue to the east.

Regional freeway access to the Plan Area is provided by Interstates (I-) 580, 980, 880 and State Route 24. I-880 is a multi-lane freeway used for community and transporting freight east to west and separates the majority of Downtown from the waterfront area next to the Oakland Estuary. Bay Area Rapid Transit (BART) tracks run underground of Broadway, cutting through the middle of the Plan Area. BART provides regional transit service to the area, with the 19th Street and 12th Street BART Stations within the Plan Area boundary. The area surrounding both the 12th Street and 19th Street BART Stations are characterized by government buildings, corporate offices, and medium-density residential units as well as a mix of land uses and buildings, from historic buildings to contemporary architecture. The Lake Merritt BART Station is located adjacent to the Plan Area boundary on 8th Street and Oak Street. In addition to BART, there is also frequent Alameda-Contra Costa Transit District (AC Transit) bus service along Broadway. AC Transit runs multiple transit lines in the Plan Area, including local, intercity, and transbay routes. The Oakland Jack London Square Ferry Terminal connects Oakland to eight other terminals in cities such as Vallejo and South San Francisco via waterways. In addition, Amtrak stops at Jack London Square and provides regional, statewide, and nationwide connections. In addition to Amtrak, there are several freight train operators that run through Jack London Square heading both east and west. The Port of Oakland's headquarters are in Jack London Square on Water Street; and Howard Terminal, which currently supports track and ancillary services, is adjacent to the Plan Area. Beyond Howard Terminal, the Port of Oakland operates terminal gates, container cranes, and port scales throughout West Oakland.

1. Background and Adjacent Planning Areas

The Plan lays out a long-term vision and planning framework for future growth and development and serves as a mechanism for ensuring that future development achieves the goals, objectives, and outcomes. With the accelerating rate of development and investment happening in downtown and throughout Oakland, important decisions need to be made about cultural resources (architectural and institutional resources and other community-identified businesses and cultural assets), the type of places and services that are critical to urban quality of life, the

methods to fund those elements, and to identify ways to strengthen the connections between downtown and the rest of the city. This is the sixth specific plan undertaken in Oakland in recent years, and the first-ever for Downtown Oakland outside of past Redevelopment Plans. Creating a Specific Plan for the historic city center helps to weave together the existing specific plans in the surrounding area, including the BVDSP, LMSAP, and WOSP.

This section provides a brief summary of relevant City of Oakland planning documents as well as Plan Bay Area, a regional planning document that provides context for priority development areas.

a. Land Use and Transportation Element of the City's General Plan

The City adopted the General Plan Land Use and Transportation Element (LUTE) and General Plan LUTE EIR in 1998. The LUTE identifies land use policies as growth and change takes place and sets forth an action program to implement the land use policies through development controls and other strategies. The LUTE identifies five Showcase Districts targeted for continued growth. The Plan Area is located within the Downtown Showcase District.

The 1998 LUTE EIR is designated as a Program EIR under CEQA Guidelines Sections 15183 and 15183.3. Significant and unavoidable impacts were identified for the following environmental resources in the 1998 LUTE EIR: Air Quality (regional emissions, roadway emissions downtown); Noise (construction noise and vibration in downtown); Public Services (fire safety in the Oakland Hills); Transportation and Circulation (roadway segment operations); Wind Hazards; and Policy Consistency (clean air plan). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

b. Broadway Valdez District Specific Plan (BVDSP)

Adopted by City Council in 2014, the BVDSP developed strategies to encourage retail and mixed-used development along Broadway between Grand Avenue and I-580. Originally referred to as "Auto Row" in the 1998 LUTE due to the area's characteristic automobile dealerships, the Broadway Valdez District contains land use and development policies that provide for destination retail, housing, transit, and walkable streets by building upon the area's existing assets. The Plan Area is located directly south of the Broadway Valdez District, and both plans share boundary lines along West Grand Avenue and Broadway/Telegraph Avenue. Because the Broadway corridor runs through the middle of the Broadway Valdez District and the Plan Area, the land use transitions between the two plan areas are intended to be complementary. Significant unavoidable impacts in the BVDSP EIR were identified for the following environmental resource topics: Aesthetics, Shadow, and Wind; Air Quality; Cultural Resources; Greenhouse Gases and Climate Change; Noise; and Transportation and Circulation. Impacts associated with the

remaining resource topics considered in the LMSAP EIR were found to be less than significant, with some requiring mitigation measures.

c. Lake Merritt Station Area Plan (LMSAP)

The LMSAP is a specific plan adopted by the City Council in 2014 and provides land use guidance within an approximate half-mile radius around the Lake Merritt BART Station. The station area is home to the Chinatown neighborhood, Laney College, the Lake Merritt Channel, government buildings, mixed-use residential, and parks and open spaces. The LMSAP objectives include encouraging multimodal travel, increasing housing near the BART Station, increasing jobs and jobs access, and supporting the existing cultural and demographic diversity of the area. The Plan Area surrounds the Lake Merritt Station Area along most of its southern, western, and northern boundaries. Significant unavoidable impacts were identified in the LMSAP EIR for the following environmental resource topics: Transportation and Circulation, Air Quality, and Cultural Resources. Impacts associated with the remaining resource topics considered in the LMSAP EIR were found to be less than significant, with some requiring mitigation measures.

d. West Oakland Specific Plan (WOSP)

In 2014, the City of Oakland adopted the WOSP and certified the WOSP EIR. The purpose of the WOSP is to provide for comprehensive, multi-faceted land use, development, and transportation strategies for selected vacant and/or underutilized commercial and industrial properties within the West Oakland community. Significant unavoidable impacts were identified in the WOSP EIR for the following environmental resource topics: Air Quality (odors, construction equipment emissions, emissions related to vehicular traffic, diesel generator emissions, gaseous toxic air contaminants); Greenhouse Gas Emissions (stationary sources); and Traffic (Level of service [LOS] and queue length at several intersections). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals. Impacts associated with the remaining resource topics considered in the LMSAP EIR were found to be less than significant, with some requiring mitigation measures.

e. Estuary Policy Plan (EPP)

The EPP was published in June 1999 as a vision and policy document for guiding future planning efforts along the Oakland waterfront, which included more fine-grained designations than the LUTE. The EPP includes objectives and policies to enhance the Oakland waterfront as a resource for the City. The EPP is considered part of the General Plan and supersedes the LUTE for the Estuary shoreline, including most of the lands on the water side of I-880 within Port and City of Oakland jurisdiction. Key EPP objectives included increasing open space and shoreline access, economic development, and community growth and benefits along 5.5 miles of urban waterfront between Adeline Street and 66th Avenue. In 2013, the City adopted the Central Estuary Area Plan

(CEAP) as a companion policy guidance document to the EPP. The CEAP addresses design guidelines and zoning regulations, infrastructure improvements, and land use priorities for the waterfront between 19th Avenue and 54th Avenue. While the Specific Plan does not overlap with the CEAP, the portion of the Plan Area south of I-880 overlaps with the Estuary Policy Plan and therefore should be consistent with the policies of the EPP.

f. Plan Bay Area

Plan Bay Area is a regional planning document that integrates long-range transportation improvements with land use and housing plans for nine counties within the San Francisco Bay Area. Plan Bay Area identifies locations approved for future growth in existing communities as Priority Development Areas, also referred to as PDAs. Designated PDAs across the nine counties are expected to accommodate 78 percent of projected new housing production (over 500,000 units) and 62 percent of projected employment growth (approximately 700,000 jobs) through the year 2040.² The entire Plan Area is identified as a PDA, and extends past the Downtown Oakland PDA boundary and a transit priority area in the City of Oakland.

g. Oakland 50-Year Urban Forest Master Plan (Estimated Completion 2022)

The City of Oakland has been awarded a grant from the California Department of Forestry and Fire Protection for the first-ever citywide inventory of trees on streets, medians, sidewalks, and landscaped parks; as well as creating the City's first ever 50-Year Urban Forest Master Plan. Using the results of the forthcoming tree inventory as well as community input, this plan will evaluate Oakland's present urban forest and develop a vision for a sustainable and equitable urban forest of the future. Urban forestry best management practices and implementation strategies will be developed and tailored for the City of Oakland in this process. City tree policies, such as the City's Protected Tree Ordinance, will undergo an evaluation and revision during this 50-Year Urban Forest Master Plan process.

2. Plan Structure

The Plan employs several tools common in long-range planning efforts. These tools function together in a hierarchical relationship: goals are overarching and represent the most important aspirations and highest priorities for the Plan. Outcomes are actionable and are directed at accomplishing the Plan's goals. Plan policies are statements of intended procedures or protocols that guide land use decisions and help achieve the Plan's desired outcomes and are intended to

² Metropolitan Transportation Commission (MTC), 2018. Priority Development Areas. Available at: <https://mtc.ca.gov/our-work/plans-projects/focused-growth-livable-communities/priority-development-areas>, accessed February 22, 2019.

fulfill its goals on a topic by topic level. The implementation measures are most specific and represent how the Plan would be carried out.

The relationship between these planning tools is illustrated in Table III-1 below. The Plan includes six goals with several outcomes, each of which contains many policies with one or more implementation measures.

TABLE III-1 HIERARCHY OF PLANNING TOOLS

Tool	Characteristics	Example
Vision & Goals	Community’s aspiration for the Plan Area and each district and neighborhood aspiration.	Develop downtown in a way that meets community needs and preserves Oakland’s unique character.
Outcomes	A measurable achievement that is intended to be reached within a specific timeframe through policies and implementation measures. Multiple Objectives can lead to one Outcome/Goal.	Development and design serve Oakland’s diverse needs, contribute to improved conditions for all, and enhance downtown’s authentic, creative, and dynamic local character.
Supportive Policies	General Plan amendments, rezoning, Planning Code revisions, development standards and guidelines, and other proposed changes or additions to City rules and regulations.	Promote density and a mix of transit-supported uses at regional transportation hubs, such as BART stations, the Amtrak station, and the ferry terminal, and major AC Transit multi-route stops.
Implementation Actions	A concrete step in order for the Specific Plan’s recommended streetscape, transportation, development, and infrastructure improvements to become reality. Implementation action items include relevant plan policies and outcomes, and existing city policies and programs. They also describe the primary responsible agency; partners, resources and actions required; estimated costs; potential funding sources; and anticipated timeframe.	Identify sites for hotels and meeting space, attract hotel developers and explore co-investment opportunities.

C. PROJECT/PLAN OBJECTIVES AND OUTCOMES

In accordance with CEQA Guidelines Section 15124, an EIR must present a statement of project objectives, which in the case of a Specific Plan, are often the same as the Plan objectives. In this EIR, the Plan’s six goals as well as 15 associated outcomes are used here as the project’s objectives. The six goals and 15 outcomes or objectives are:

- **Goal 1:** Create opportunities for economic growth and security for all Oaklanders.
 - **Economic Opportunity Outcome E-1:** Economic activity builds community wealth and fuels the constant improvement of local conditions.

- **Economic Opportunity Outcome E-2:** Downtown provides affordable, accessible space for businesses and community organizations, and sustains employment opportunities across a broad array of job skills.
- **Economic Opportunity Outcome E-3:** Access to services, jobs, education, and training gives all Oaklanders an opportunity to find local employment and economic security.
- **Goal 2:** Ensure sufficient housing is built and retained to meet the varied needs of current and future residents.
 - **Housing Outcome H-1:** Sufficient housing is built and retained downtown to support a full range of lifestyles and choices essential to Oaklanders.
 - **Housing Outcome H-2:** Current and long-time Oaklanders remain an important part of the community.
- **Goal 3:** Make downtown's streets comfortable, safe, and inviting and improve connections to the city as a whole so that everyone has efficient and reliable access to downtown's jobs and services.
 - **Mobility Outcome M-1:** Downtown is well-connected across its internal and adjacent neighborhoods with bicycle and pedestrian networks that are accessible and safe for people of all ages and abilities.
 - **Mobility Outcome M-2:** Communities that are more transit-dependent are well-served to travel to and from Downtown with frequent, reliable, and safe transit service.
 - **Mobility Outcome M-3:** Oaklanders connect to Downtown's resources with transportation options that accommodate people of all ages and abilities from their front door to their destination and back.
- **Goal 4:** Encourage diverse voices and forms of expression to flourish.
 - **Culture Keeping Outcome C-1:** Downtown is a place where all of Oakland's residents can see and express themselves and their culture.
 - **Culture Keeping Outcome C-2:** Festivals, outdoor art installations, and cultural events are integral elements in downtown's public sphere and spaces.
 - **Culture Keeping Outcome C-3:** Oakland's artists and creative community are able to find workspaces, performance spaces, and galleries in downtown that they can access and afford and see their work integrated into the built environment and public domain.
- **Goal 5:** Provide vibrant public spaces and a healthy environment that improve the quality of life downtown today and for generations to come.

- **Community Health Outcome CH-1:** All Oaklanders can lead safe and healthy lives, enjoying streets, public spaces, and parks downtown that provide opportunities to stay active and build community.
- **Community Health Outcome CH-2:** Environmental stewardship informs operational, planning, and capital improvement decisions to create a more sustainable downtown where everyone can adapt and thrive in the face of changing conditions.
- **Goal 6:** Develop downtown in a way that contributes to community needs and preserves Oakland's unique character.
 - **Land Use Outcome LU-1:** Development and design serve Oakland's diverse needs, contribute to improved conditions for all, and enhance downtowns' authentic, creative, and dynamic local character.
 - **Land Use Outcome LU-2:** Oakland's extensive array of historic buildings, cultural enclaves, civic organizations, and culture keepers are preserved within downtown's built environment.

D. PLAN COMPONENTS

The Specific Plan consists of broadly conceived goals, objectives, policies, and implementation measures, only some of which are required to be analyzed under CEQA. The Plan component descriptions that are included in this section focus on components that could result in potentially significant impacts to the physical environment. These components are described below beginning with the proposed land use character intensities throughout the Plan Area, followed by proposed amendments to General Plan Land Use Designations and allowed development intensity and density which are organized by planning subarea. An overview of proposed circulation and public realm improvements as well as Plan policies related to historic resources is also provided.

1. Land Use Character and Intensity

The Plan details Land Use and Urban Form Strategies that include policies and actions to implement the Plan's vision for downtown's physical environment, locating areas of intensity and opportunities for transformative change that are positioned around transit and activity nodes. The Plan includes the following to guide development character and intensity:

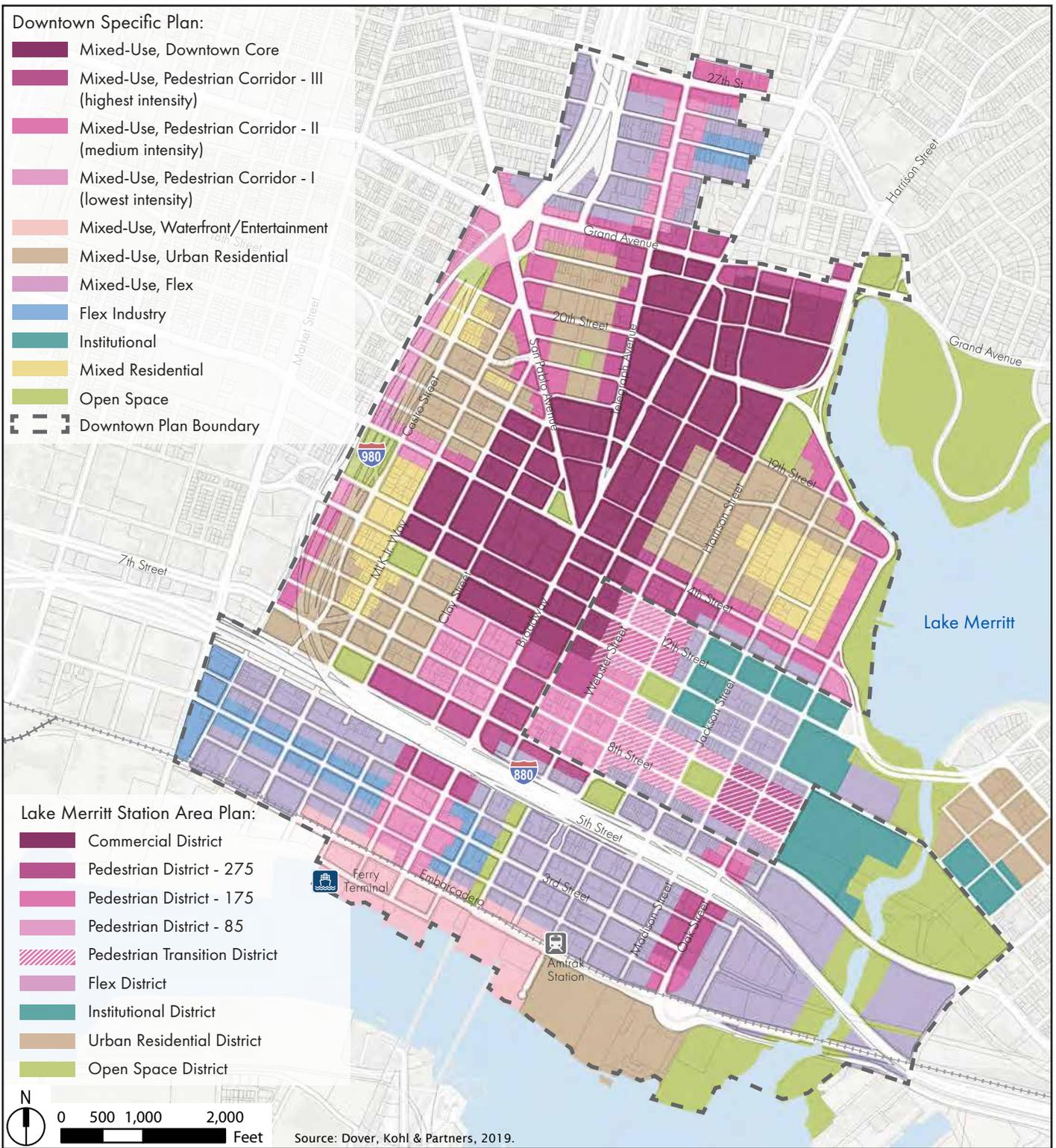
- Land Use Character areas which include sub-areas ranging in intensity.
- General Plan Land Use Designation amendments.
- Development Intensity Map which identifies maximum permitted Floor Area Ratio (FAR), residential density, and building height.

The Plan also identifies opportunity sites as the parcels that are most likely to redevelop as they are currently underutilized. Each of these are described below as presented in the Plan and will be used to guide the City's implementation actions including amending the General Plan and Zoning.

2. Character Areas

The Plan proposes a total of eight Land Use Character areas as shown in Figure III-4 and described below beginning with the least intense and continuing to the most intense. The greatest intensity/density of development is proposed to remain in the Mixed-Use Downtown Core, focused around the existing downtown BART stations. The Character areas are informed by the Plan Area's historic resources and cultural districts. For example, portions of the Lakeside neighborhood, Old Oakland, and West of San Pablo (near I-980) are identified as Mixed Residential, reflecting the residential character of historic buildings. The Plan states that one important aspect of economic development strategy for downtown, in addition to encouraging more housing and commercial development in general, is to preserve and encourage more spaces for arts, culture, and light manufacturing. The Plan's Land Use Framework introduces a Mixed-Use Flex character area in addition to the Flex Industry character area to allow for a wider range of flexible ground floor uses in the Jack London District and Koreatown/Northgate:

- **Flex Industry** would encourage a walkable, urban area of interconnected streetscapes with a variety of small- to large-footprint buildings that can accommodate light industrial or commercial uses and encourage investment and economic opportunity. Uses in this character area would include a mix of industry/businesses such as light industrial, warehousing, and manufacturing/maker space.
- **Mixed Residential** would encourage a walkable, urban area of interconnected residential neighborhood streetscapes with medium-intensity housing choices in small- to medium-footprint buildings at or near the sidewalk that support neighborhood-serving retail and services downtown. This area would include a mix of medium-density housing types.
- **Mixed-Use Waterfront/Entertainment** would encourage a walkable, urban area of interconnected, tree-lined, mixed-use streetscapes and waterfront paths with small- to large-footprint buildings at or near the sidewalk.
- **Mixed-Use Flex** would encourage a walkable, urban area of interconnected, mixed-use streetscapes with a variety of small- to large-footprint buildings that can accommodate a diverse range of uses. This zone would allow for flex uses at the ground floor, including manufacturing/maker space, artist studios, or production space.



- **Mixed-Use Urban Residential** would encourage a walkable, urban area of interconnected, tree-lined, neighborhood streetscapes with medium- to high-intensity housing choices in small- to large-footprint buildings at or near the sidewalk to support neighborhood-serving retail and services.
- **Mixed-Use Institutional** would encourage a mix of uses to complement Laney College. Medium- to high-intensity development is envisioned in areas leading to the Lake Merritt BART Station.
- **Mixed-Use Pedestrian Corridor** would encourage walkable, urban area with high intensity housing choices in small- to large-footprint buildings with non-residential ground floors at the sidewalk.
- **Mixed-Use Downtown Core** would encourage a walkable, urban area of interconnected, tree-lined, mixed-use city center streetscapes, with the most intense mix of uses centered on commercial office uses. This area would be concentrated around BART stations in the Central Core and Lake Merritt Office districts. Buildings would be typically mid-rise to high-rise.

As described above, the City is currently reviewing a proposed project to reuse the Howard Terminal site for a new baseball stadium, waterfront open space, and mixed-use development. If the City approves this project and it moves forward, the land use and character of surrounding blocks could be changed as follows:

- Area between Brush, Clay, 2nd, and 4th streets would become Mixed Use Flex, meaning that the form and character of the proposed Jack London Maker District (along 3rd Street) would not be preserved in this option.

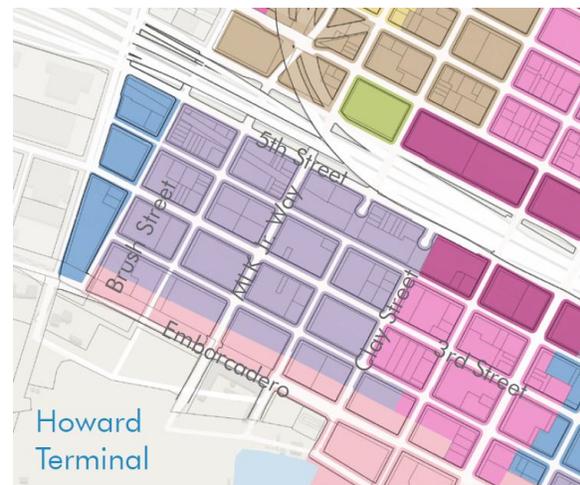
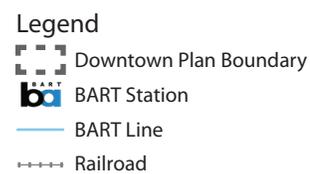
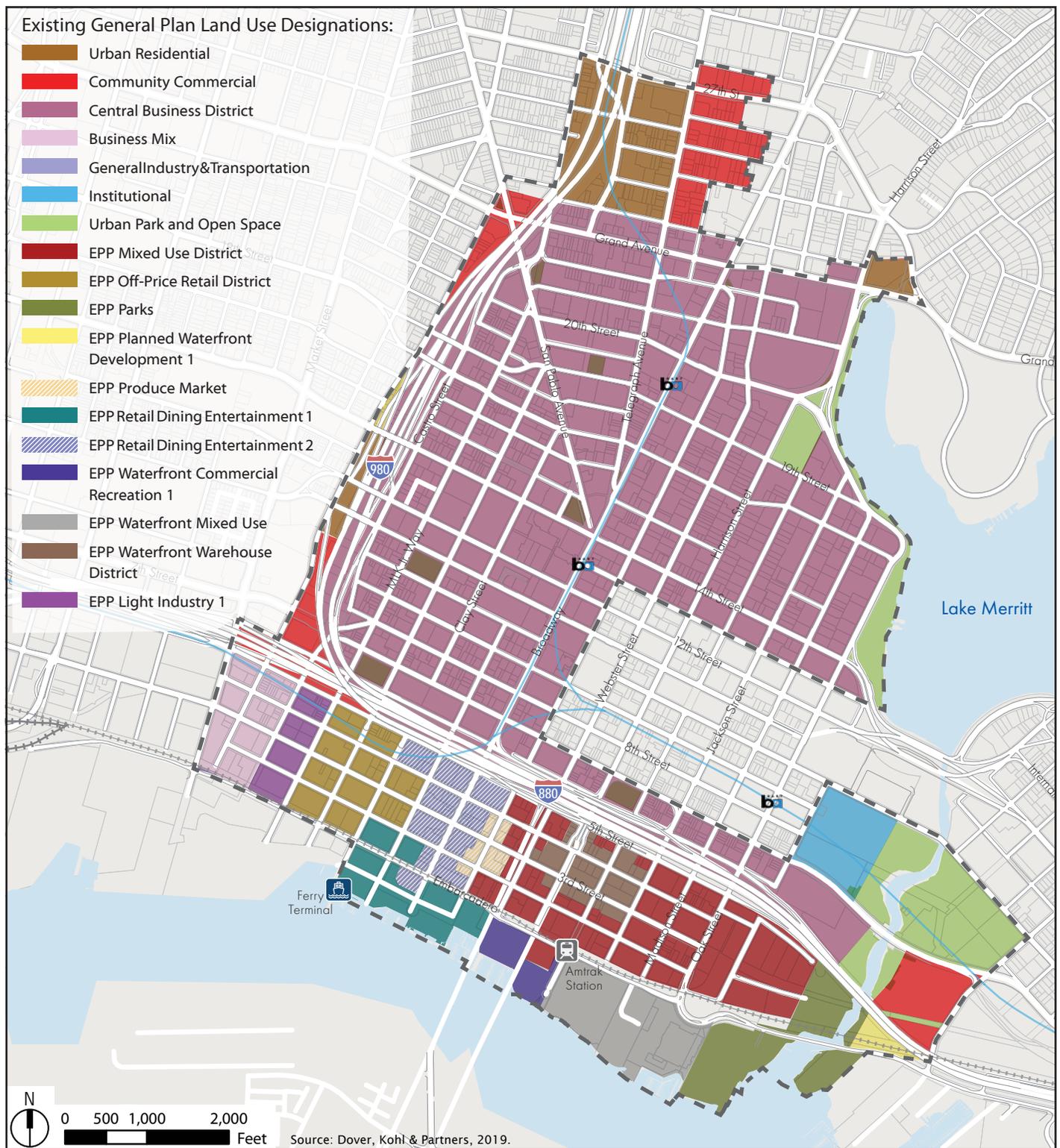


Photo 1: Proposed Land Use Character – Howard Terminal Option

a. General Plan Land Use Designations

The Plan would require amending the General Plan land use designations for 34 areas. Current General Plan Land Use Designations are shown in Figure III-5 and the proposed amendments are shown in Figure III-6 and listed in Table III-2. These changes would primarily (1) increase the amount of land designated as Central Business District and (2) reclassify some parcels under the EPP Land Use designations, which are further described in *Chapter IV, Policy*.



Downtown Oakland Specific Plan EIR

Figure III-5
Current General Plan Land Use Designations

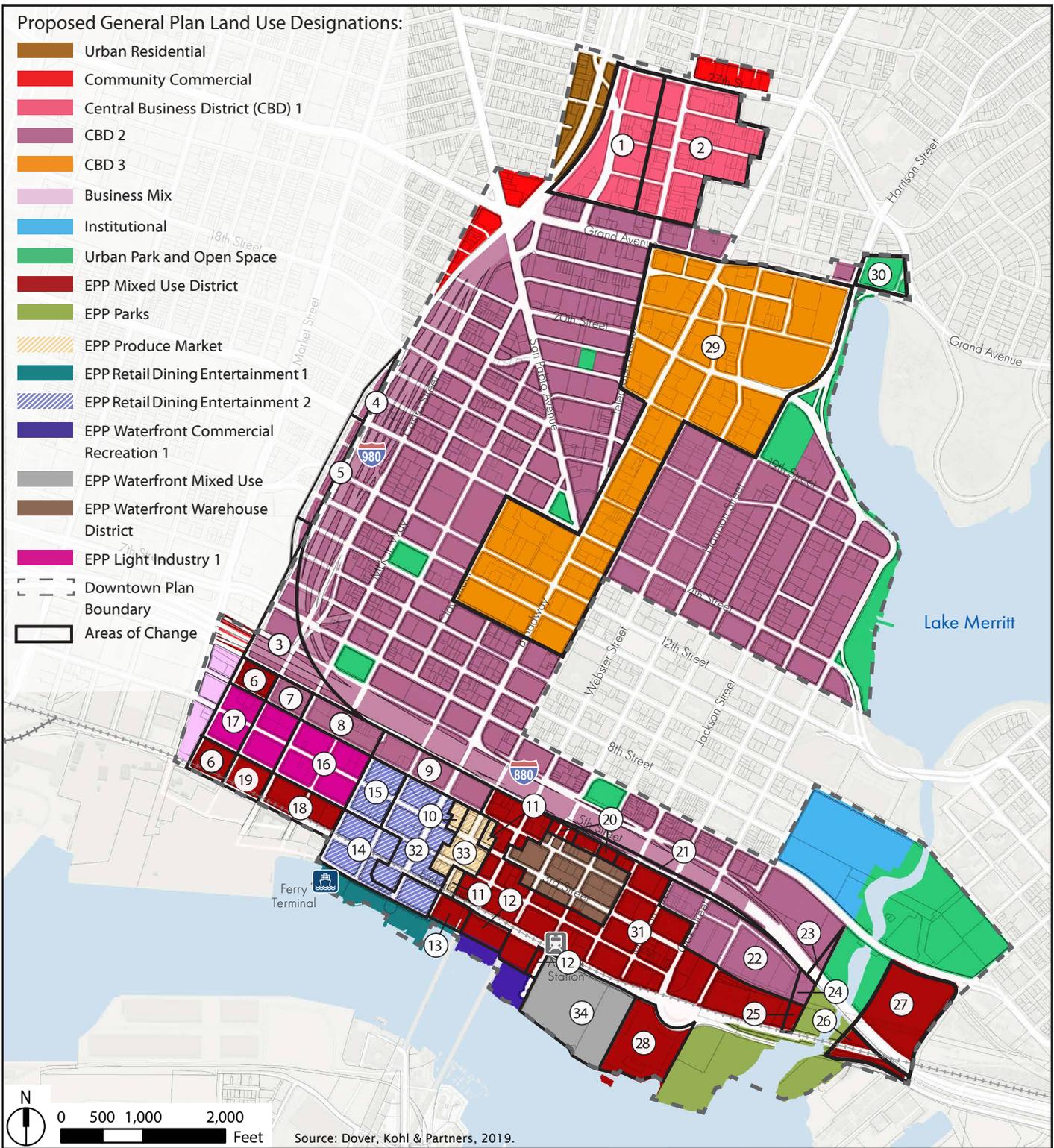


TABLE III-2 PROPOSED GENERAL PLAN AMENDMENTS

ID	Existing Designations	Density		Proposed Designation Changes	Density	
		FAR	(SF)		FAR	(SF)
1	LUTE Urban Residential	NA	261	LUTE Central Business District 1	12.0	109
2	LUTE Community Commercial	5.0	261	LUTE Central Business District 1	12.0	109
3	LUTE Community Commercial	5.0	261	LUTE Central Business District 2	20.0	87
4	LUTE Mixed Housing Type Residential	NA	1,089	LUTE Central Business District 2	20.0	87
5	LUTE Urban Residential	NA	261	LUTE Central Business District 2	20.0	87
6	LUTE Business Mix	4.0	NA	EPP Mixed Use District	12.0	109
7	EPP Light Industry 1	2.0	1,089	LUTE Central Business District 2	20.0	87
8	EPP Off-Price Retail District	2.0	1,089	LUTE Central Business District 2	20.0	87
9	EPP Retail Dining Entertainment 2	7.0	261	LUTE Central Business District 2	20.0	87
10	EPP Retail Dining Entertainment 2	7.0	261	EPP Produce Market	2.5	817
11	EPP Mixed Use District	5.0	261	EPP Produce Market	2.5	817
12	EPP Waterfront Commercial Recreation 1	3.0	NA	EPP Mixed Use District	2.5	817
13	EPP Retail Dining Entertainment 1	3.5	NA	EPP Mixed Use District	12.0	109
14	EPP Retail Dining Entertainment 1	3.5	NA	EPP Retail Dining Entertainment 2	12.0	109
15	EPP Off-Price Retail District	2.0	1,089	EPP Retail Dining Entertainment 2	12.0	109
16	EPP Off-Price Retail District	2.0	1,089	EPP Light Industry 1	2.0	1,089
17	LUTE Business Mix	4.0	NA	EPP Light Industry 1	2.0	1,089
18	EPP Off-Price Retail District	2.0	1,089	EPP Mixed Use District	12.0	109
19	EPP Light Industry 1	2.0	1,089	EPP Mixed Use District	12.0	109
20	EPP Waterfront Warehouse District	5.0	327	EPP Mixed Use District	12.0	109
21	[blank]	NA	NA	LUTE Central Business District 2	20.0	87
22	EPP Mixed Use District	5.0	261	LUTE Central Business District 2	20.0	87
23	LUTE Urban Park and Open Space	NA	NA	LUTE Central Business District 2	20.0	87
24	EPP Parks	NA	NA	LUTE Central Business District 2	12.0	109
25	EPP Parks	NA	NA	EPP Mixed Use District	12.0	109
26	EPP Planned Waterfront Development 1	1.0	1,089	EPP Mixed Use District	12.0	109
27	LUTE Community Commercial	5.0	261	EPP Mixed Use District	12.0	109

TABLE III-2 PROPOSED GENERAL PLAN AMENDMENTS

ID	Existing Designations	Density		Proposed Designation Changes	Density	
		FAR	(SF)		FAR	(SF)
28	EPP Waterfront Mixed Use	2.0	817	EPP Mixed Use District	12.0	109
29	LUTE Central Business District (CBD)	20.0	87	LUTE Central Business District 3	30.0	65
30	LUTE Urban Residential	NA	261	LUTE Urban Park and Open Space	NA	NA
Changes to FAR and Density for Existing EPP Land Use Classifications						
31	EPP Mixed Use District	5.0	261	EPP Mixed Use District	12.0	109
32	EPP Retail Dining Entertainment 2	7.0	261	EPP Retail Dining Entertainment 2	12.0	109
33	EPP Produce Market	1.0	1,089	EPP Produce Market	2.5	817
34	EPP Waterfront Mixed Use	2.0	817	EPP Waterfront Warehouse District	8.0	200

Note: SF = square feet
 Source: Public Review Preliminary Draft Plan, August 2019.

The Plan also includes an option to amend the General Plan Land Use in proximity to the Howard Terminal, which is immediately adjacent to the Plan Area’s southwest boundary along the Estuary (see amendments #6, #19, and #18 as shown below and listed in Table III-2). The City is currently reviewing a proposed project to reuse the Howard Terminal site for a new baseball stadium, waterfront open space, and mixed-use development. If the City approves this project and it moves forward, the Plan proposes to amend the General Plan Land Use designations from LUTE Business Mix, EPP Light Industry 1, and EPP Off-Price Retail District to EPP Mixed Use District in the adjacent blocks between Brush, Clay, 2nd, and 4th streets to support more intense development. This is referred to as the Howard Terminal Option.



Photo 2: Proposed General Plan Amendments – Howard Terminal Option

b. Development Intensity

Existing maximum development intensity permitted within the Plan Area including maximum height, Floor Area Ratio (FAR), and residential density for each downtown zone shown in Figure III-7.

The proposed Development Intensity is shown in Figure III-8, which also identifies the proposed maximum permitted FAR, residential density, and building height. Figures III-9, 10 and 11 provide a comparison of the proposed with current maximum permitted FAR, residential density, and building height, respectively. The intensity standards proposed in the Plan are presented according to the color legend and then areas where increases or decreases are proposed are highlighted with hatching (white decrease and black for increase) and the existing standards are shown in the white numbered boxes where a change is proposed.

The Plan proposes a net increase in development intensity and density throughout the Plan Area. In most areas, increases are proposed but, in some instances, decreases are proposed to achieve the identified the community's vision or be responsive to the existing context including historic resources. In addition, an aerial of potential future development is shown in Figure III-12, which depicts both anticipated development through 2020 (approved/under-construction), and potential future development through 2040.

Area where increases in development intensity/density are focused include the Central Core (near transit, and where mixed-use workplace opportunity sites are present); areas of Koreatown/ Northgate (KONO) that have much lower allowed height than the balance of downtown (excluding historically significant areas and that line major corridors such as Telegraph Avenue and 27th Street), and the I-980 corridor; and portions of Jack London District identified as transformational opportunity areas (described below), including the Oak Street corridor and Victory Court.

Zoning for the Jack London District has not been updated recently and is therefore inconsistent with the General Plan. Development proposals in the Jack London District typically utilize form standards of the General Plan, making it difficult to compare development potential to other downtown lots where density is regulated by square feet of lot area per unit.

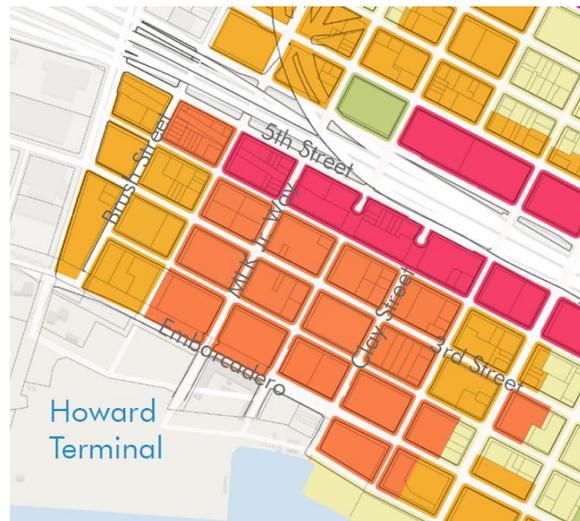
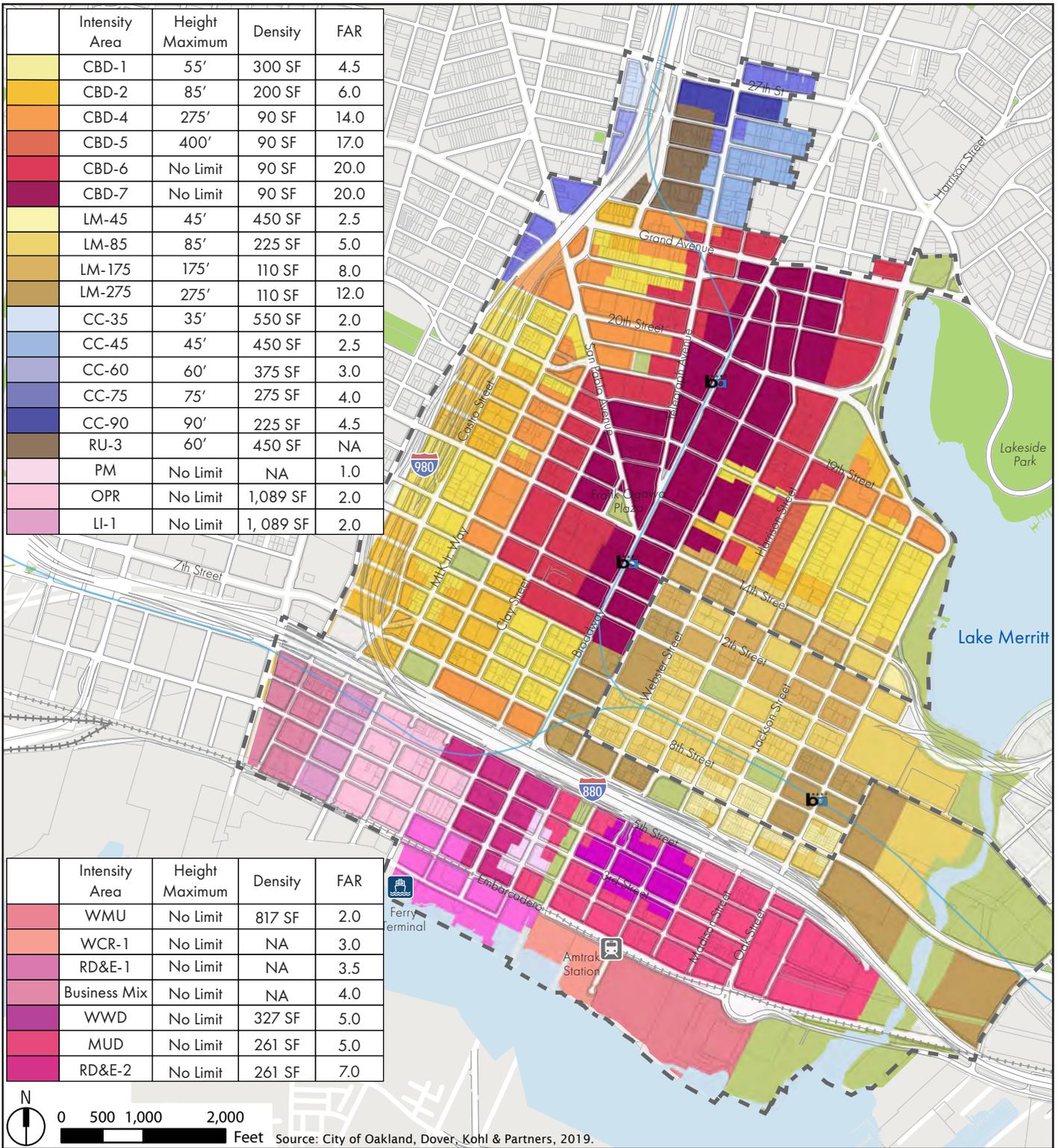


Photo 3: Proposed Maximum Intensity – Howard Terminal Option

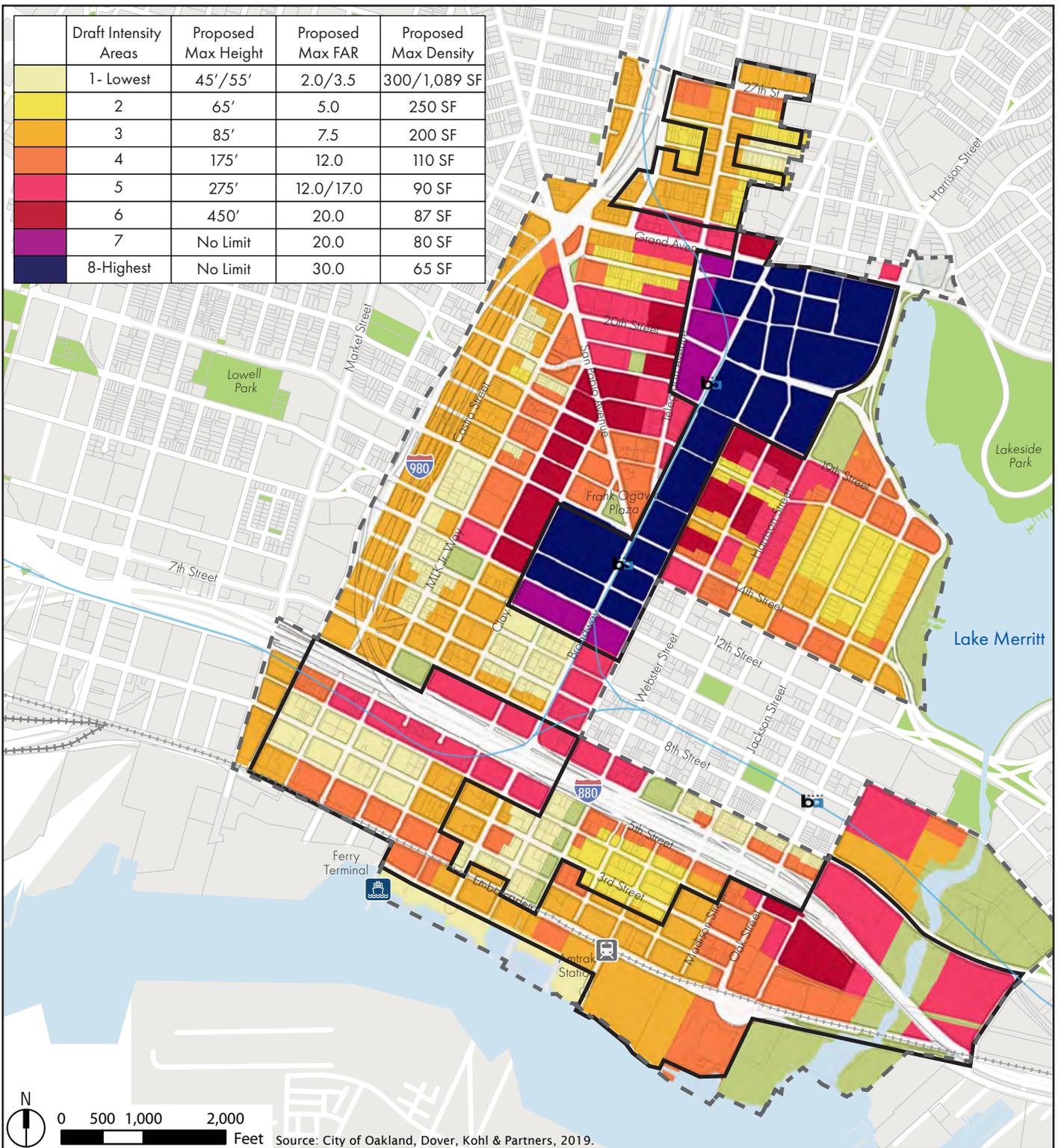


Legend

- Downtown Plan Boundary
- Parks
- BART Station
- BART Line
- Railroad

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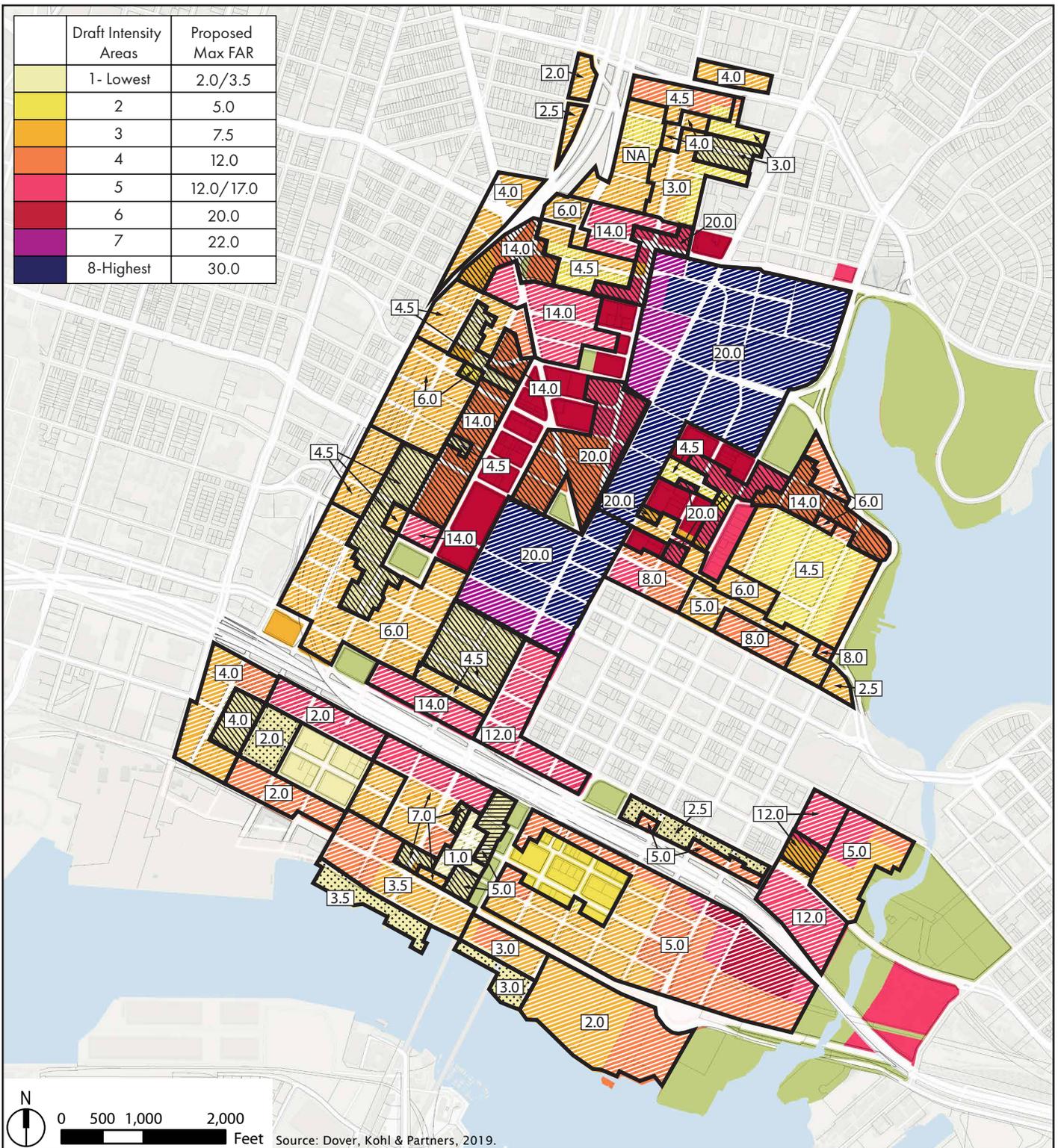
Figure III-7
Existing Development Intensity Map



- Legend**
- Downtown Plan Boundary
 - Parks
 - BART Station
 - Areas subject to Zoning Incentive Program to achieve maximum FAR, height, and/or density
 - BART Line
 - Railroad

Downtown Oakland Specific Plan EIR

Figure III-8
Proposed Draft Development Intensity Map

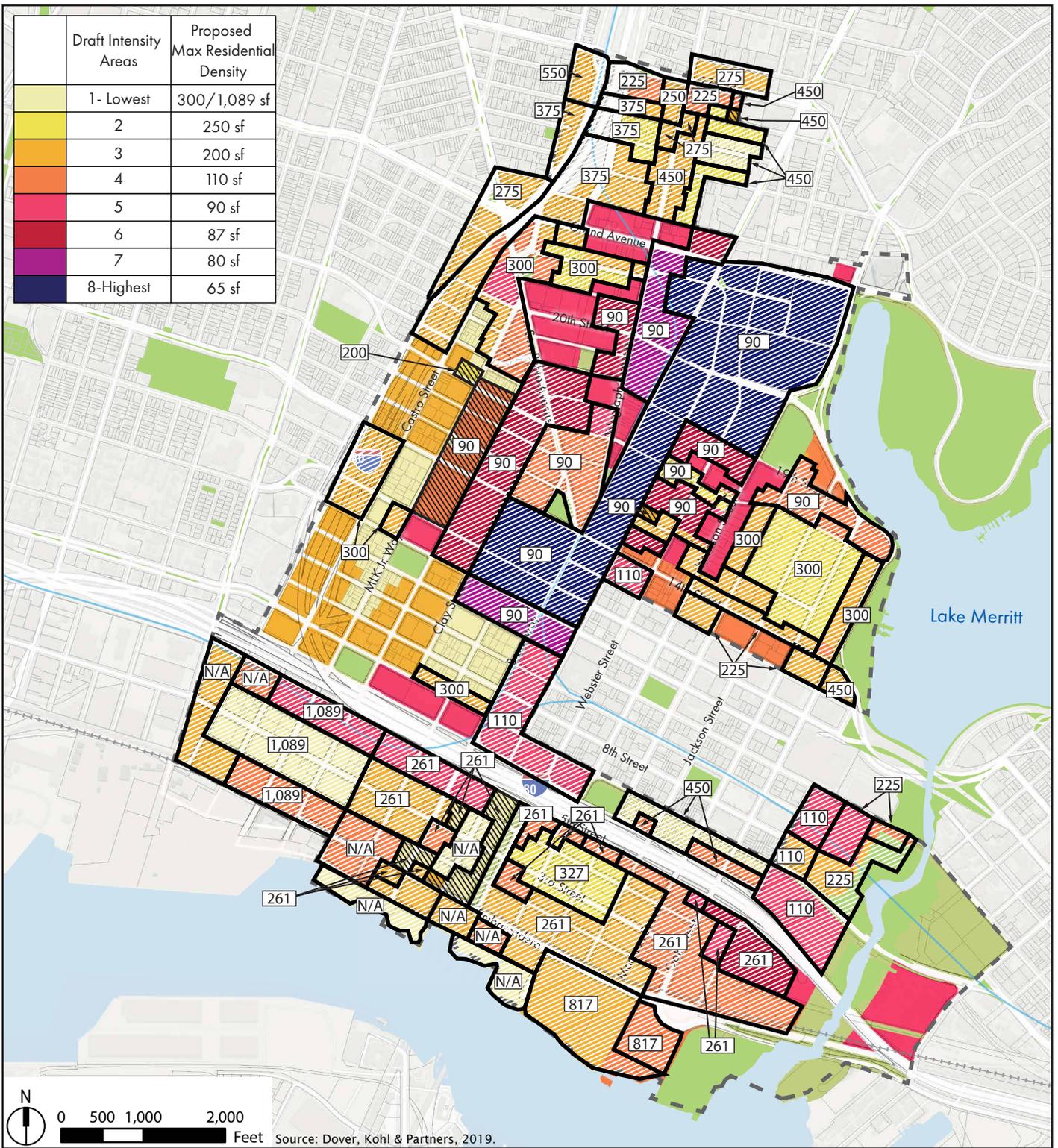


Legend

- Downtown Plan Boundary
- Parks
- BART Station
- BART Line
- Railroad
- Proposed Increased FAR Areas
- Proposed Decreased FAR Areas
- Existing FAR
- Current maximum FAR ranges between 2.0 and 3.5; Proposed maximum FAR is 2.0 or 3.5

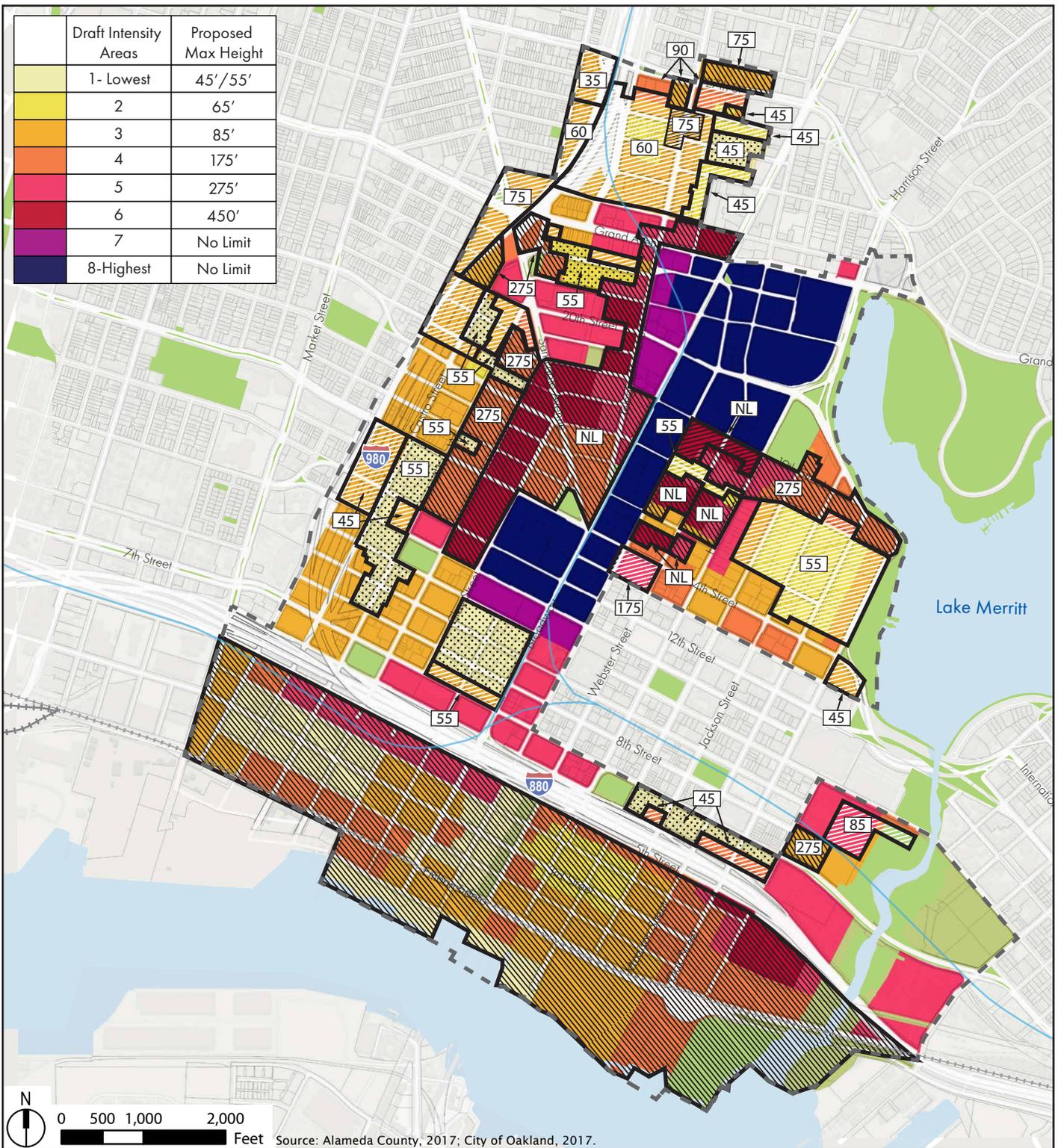
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Figure III-9
Proposed FAR Change Areas



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Figure III-10
Proposed Residential Density Change Areas



Legend

- Downtown Plan Boundary
- Parks
- BART Station
- Proposed Increased Height Limit Areas
- BART Line
- Proposed Decreased Height Limits Areas
- Railroad
- Existing Height Limits
- Current maximum height ranges between 45' and 55'; Proposed maximum height is 45' or 55'

Downtown Oakland Specific Plan EIR

Figure III-11
Proposed Height Change Areas



Legend



DOSP Potential Future Development Through 2040



Anticipated Development (Approved/Under-Construction)

The increased intensity allowed can be in the form of increased height, FAR, or increased density provisions (to encourage micro-units and other affordable-by design residential unit types). This map identifies areas with the most significant potential for change from existing regulations.

Under the Howard Terminal Option, the intensity of development in the surrounding blocks would be adjusted so that there would be increased intensity for the area between Brush, Clay, 2nd, and 4th streets adjacent to Howard Terminal.

c. Opportunity Sites

Downtown Oakland is undergoing a period of rapid growth and change. There are a number of sites where new development has been proposed and is approved or in the approval process, under construction or just recently constructed. New development on these anticipated development sites will affect downtown's urban form and character. As part of the Plan process, "development opportunity sites" were identified and mapped as shown in Figure III-13 below. In addition, areas with significant clusters of these sites are shown as transformational opportunity areas as shown in Figure III-14. The City's focus on these sites and areas is to encourage development that would enhance the Plan Area and achieve the Plan's goals and objectives. Specifically, these development opportunity sites include:

- Infill sites which are vacant land (including surface parking).
- Underutilized sites or sites with buildings that could better contribute to the public realm.

The Downtown Central Core area, centered around existing BART stations, provides a dense concentration of offices. The Land Use Framework, as described above, seeks to balance the need for office space, with market forces for residential development. Figure III-15, supplements the Land Use Character Map by locating Priority Office sites near BART stations within the Mixed-Use Downtown Core Character area.

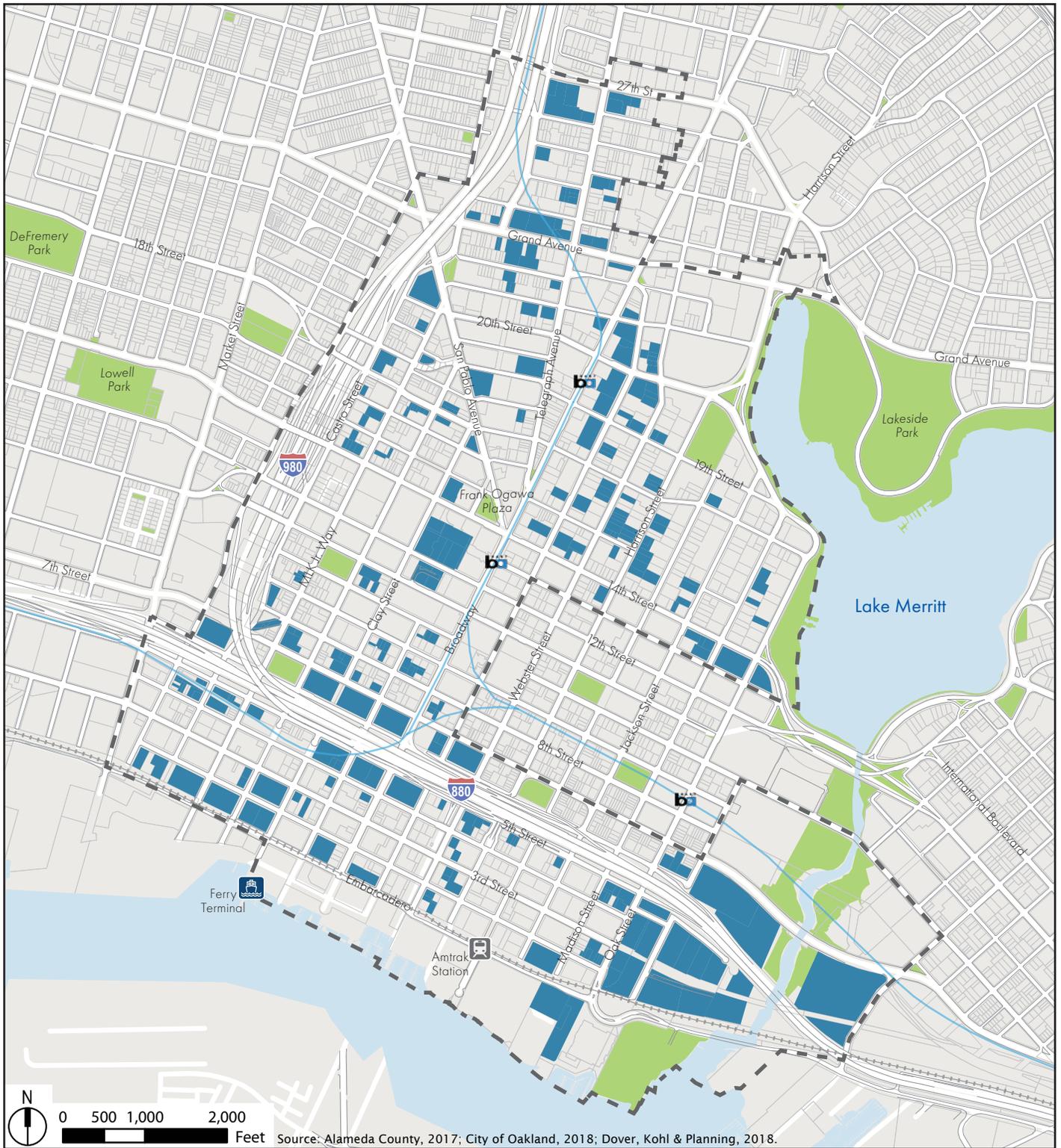
3. Circulation and Street Network Changes

The exact amount of future development cannot be predicted with any precision in order to evaluate the environmental consequences of specific plan implementation. Nevertheless, assumptions have been made about street and infrastructure improvements anticipated to be funded and implemented as conditions of new private development.

a. Pedestrian Network

(1) Safety

A well-connected pedestrian network is an important component of healthy communities, especially healthy downtowns. 36 percent of Oakland's pedestrian injuries and fatalities occur on

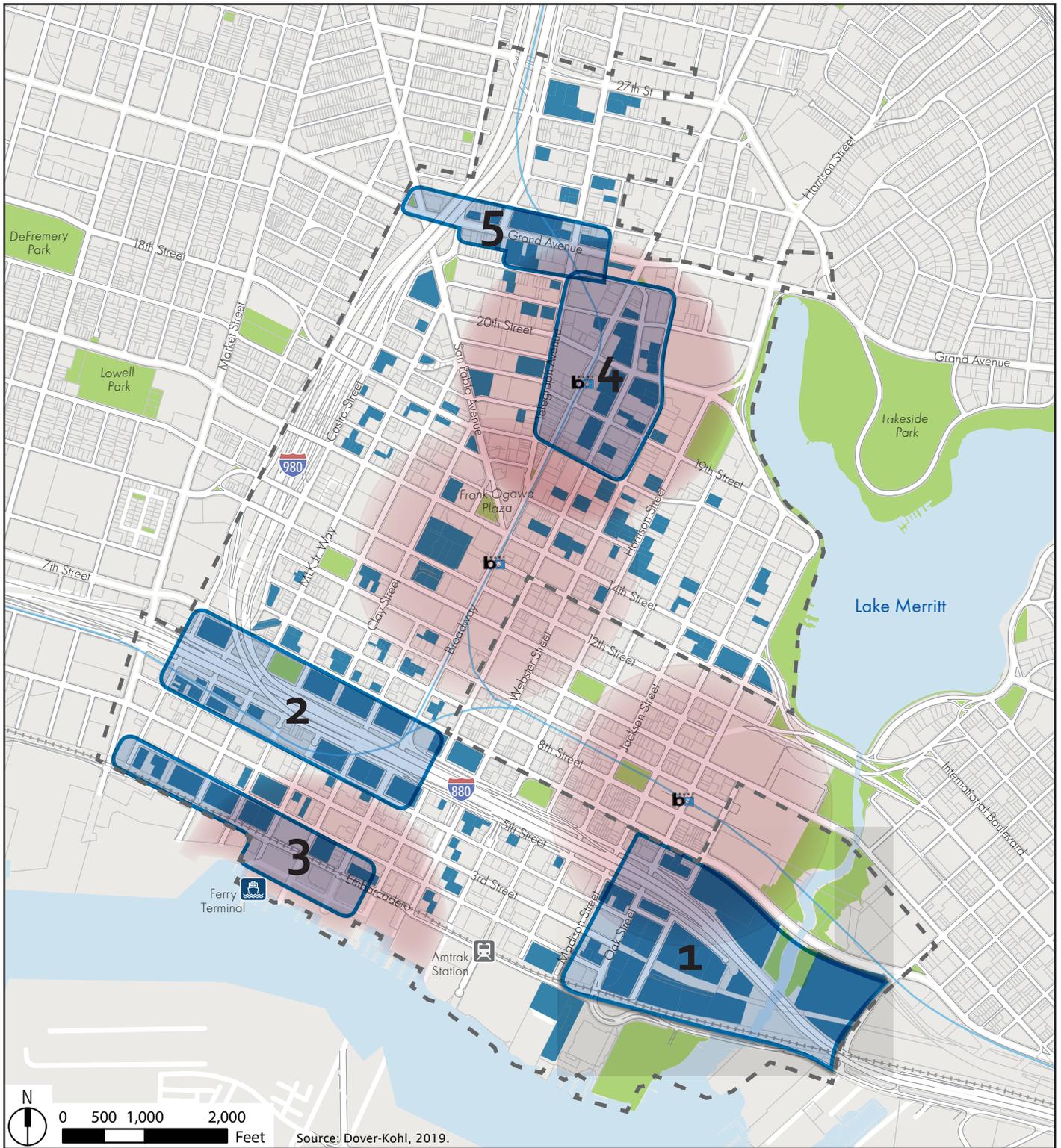


Legend

- Downtown Plan Boundary
- Opportunity Sites
- Parks
- ba BART Station
- BART Line
- Railroad

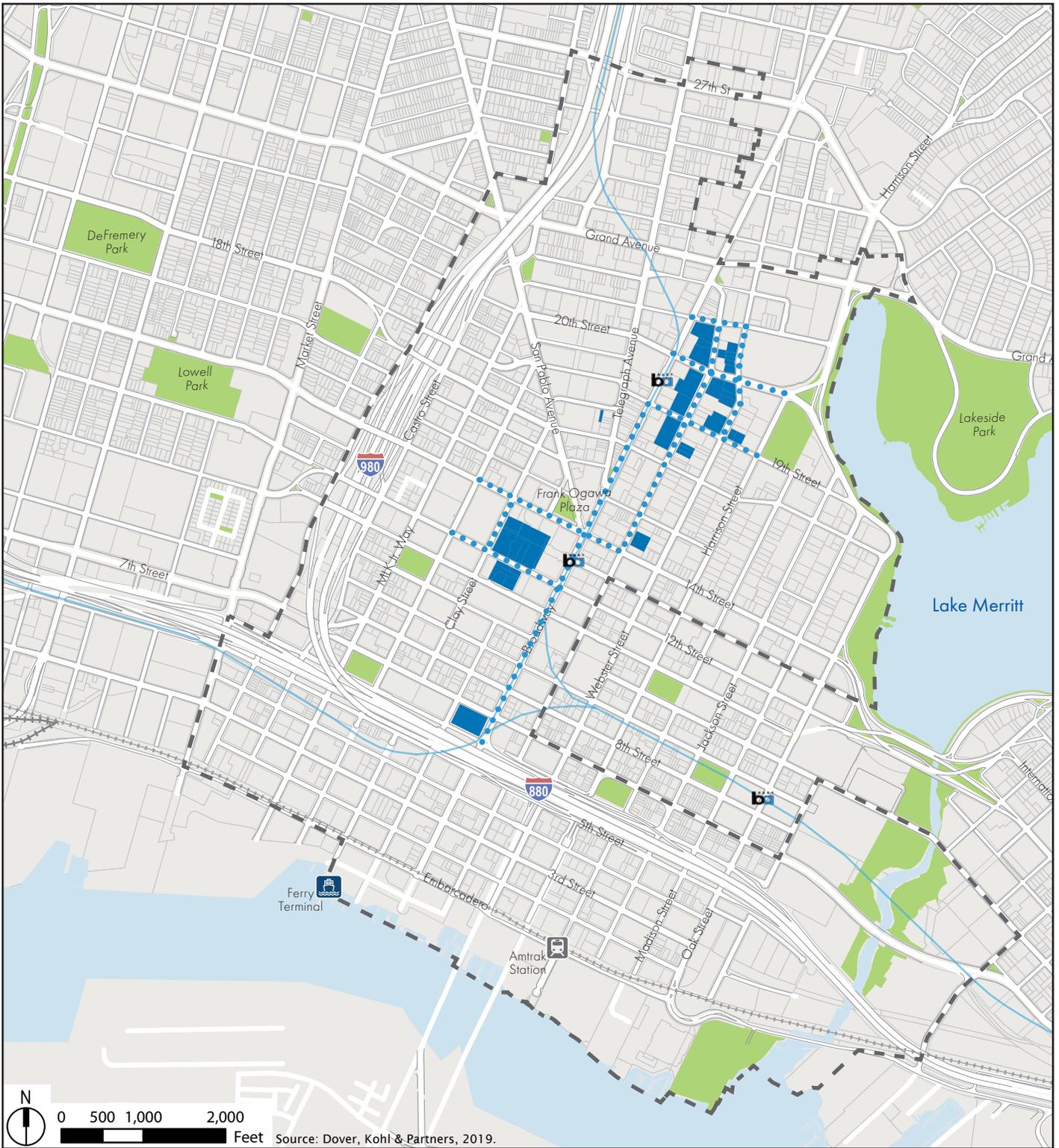
Downtown Oakland Specific Plan EIR

**Figure III-13
Opportunity Sites**



Downtown Oakland Specific Plan EIR

**Figure III-14
Transformational Opportunity Areas**



- Legend**
- Downtown Plan Boundary
 - b BART Station
 - b Office Priority Sites
 - b Priority Office Corridors
 - b BART Line
 - Parks
 - Railroad

Downtown Oakland Specific Plan EIR

**Figure III-15
Priority Office Sites**

just 2 percent of its streets. Collectively these streets are referred to as Oakland’s “High Injury Network,” shown in Figure III-16. Safety improvements along streets and at intersections include:

- Visible crossing treatments that minimize crossing distance at intersections and interchanges.
- Street design and signal timing adjustments that support slower vehicle speeds and prioritize pedestrians.
- Reallocating excess space from traffic lanes to other uses, and parking restrictions near crosswalks to improve sightlines.

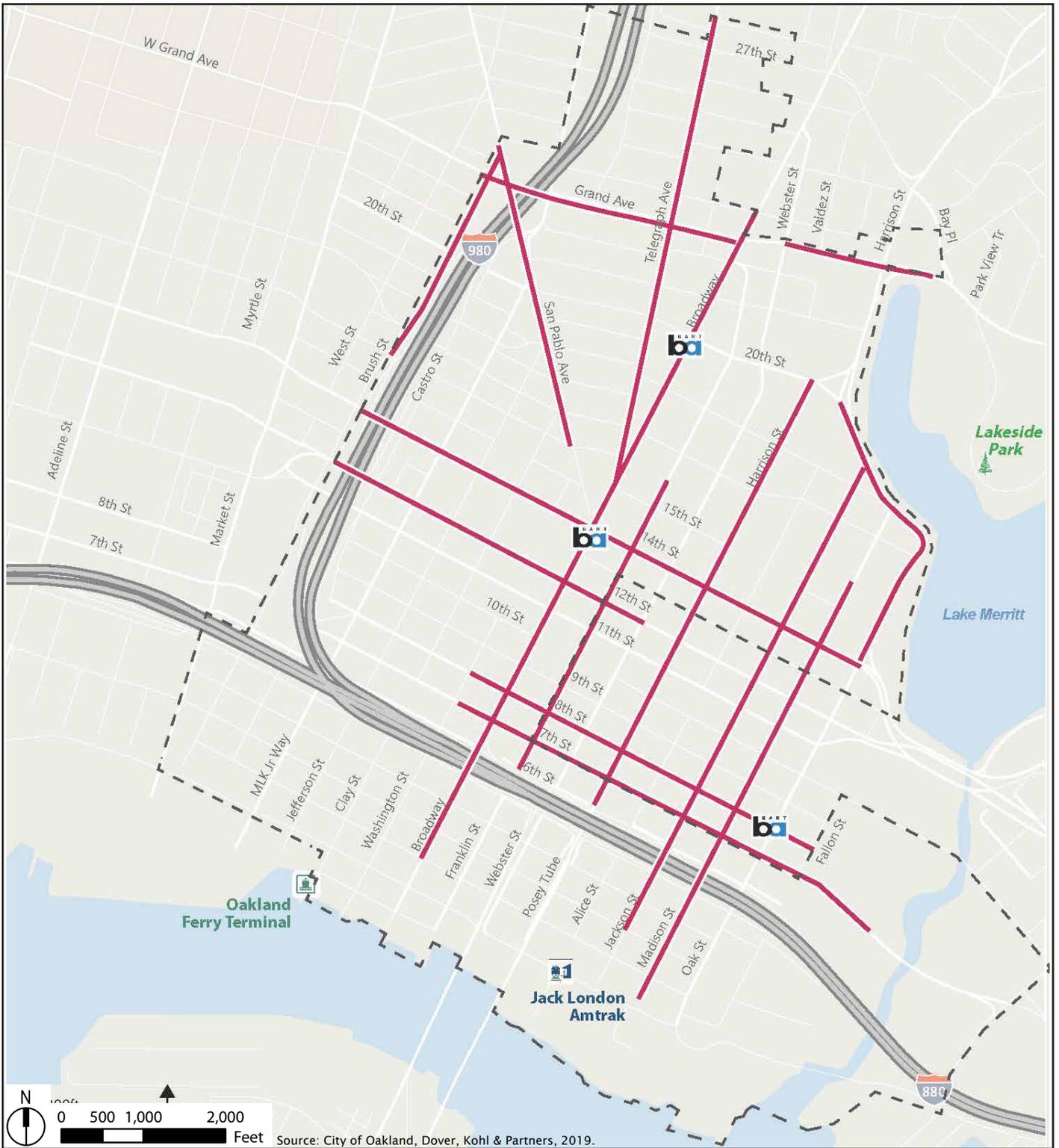
For a complete list of pedestrian safety projects see Appendix B: Table M-1: Pedestrian Safety Project List.

(2) Connectivity and Access Improvements

Freeway crossings present challenging pedestrian and bicycling conditions in Downtown Oakland and create barriers between downtown, West Oakland, Jack London, and other nearby neighborhoods. There are other projects independent of the Specific Plan that are already addressing this, the Oakland/Alameda Access Project, which would improve access between I-880 and I-980, the Posey and Webster Tubes, Jack London, and Alameda. Connectivity and access improvements within the Specific Plan are shown on Figure III-17 and include:

- Filling in gaps in sidewalk network and widening sidewalks.
- Improvements at freeway interchanges, over-and under crossings.
- Opening new street connections or segments where pedestrian network is incomplete or disconnected.
- Streetscape amenities such as lighting and wayfinding signages.
- Directional curb ramps and accessible pedestrian signals.
- Completing the high priority and lower priority “Green Loop” system of integrated walking and biking paths through downtown to link cultural districts, connect people seamlessly to all the downtown waterfronts (Lake Merritt, Channel and Estuary), and improve access to adjacent neighborhoods and districts as well as other improvements and connectivity between parks.

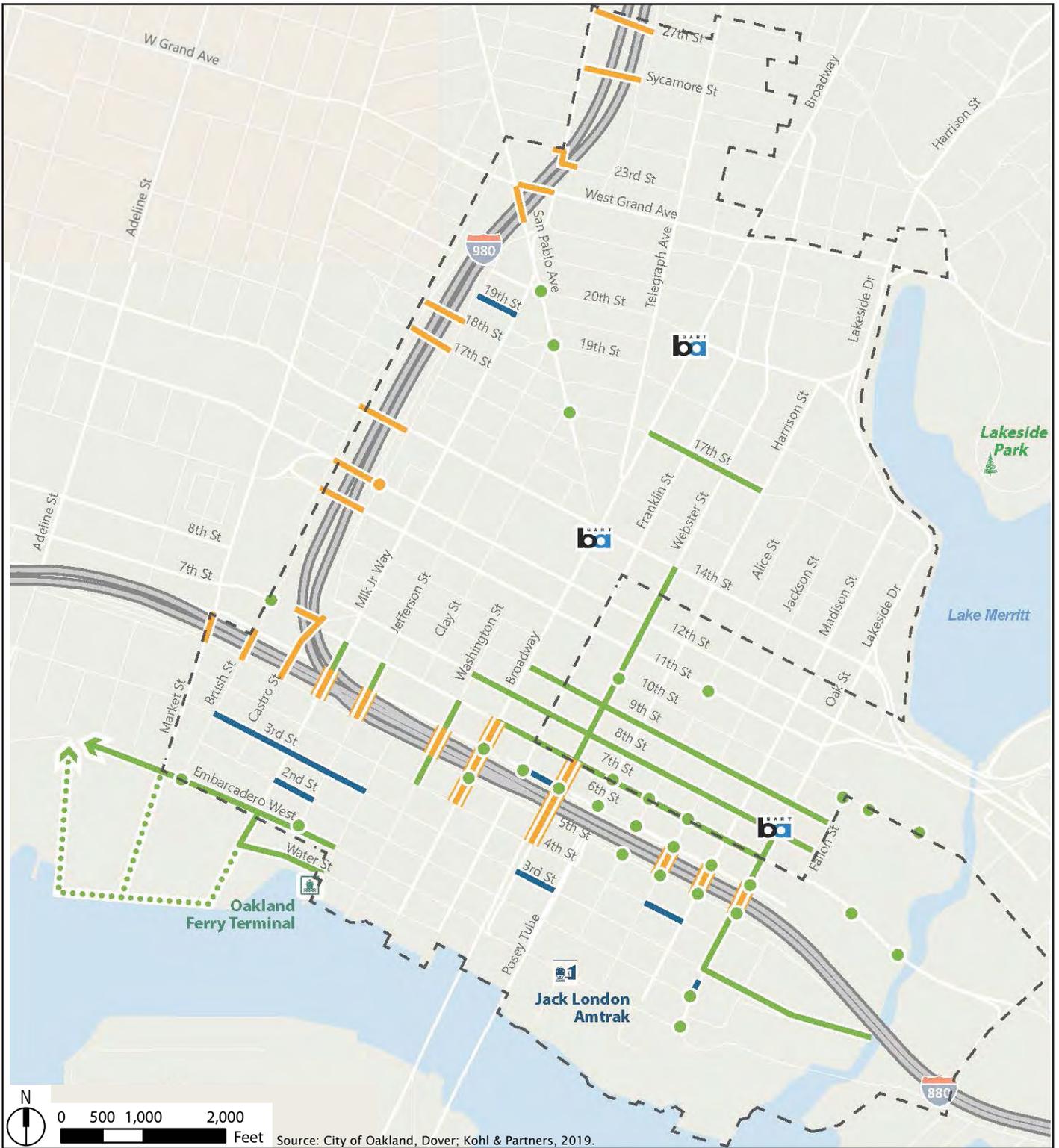
For a complete list of connectivity and access improvements projects see Appendix B: Table M-2, as well as Table M-3 for infrastructure changes that provide safer pedestrian access at freeway crossings.



- Legend**
- Downtown Plan Boundary
 - ba BART Station Locations
 - High Injury Network Corridor

Downtown Oakland Specific Plan EIR

Figure III-16
High Injury Network Corridors



Legend

- Downtown Plan Boundary
- Sidewalk Closure Gap
- BART Station Locations
- Connectivity Improvement
- Freeway Crossing Improvement

Downtown Oakland Specific Plan EIR

Figure III-17
Proposed Connectivity and Access Improvements

b. Bicycle Network

The proposed bicycle network for the Plan includes two tiers: Short-term Network, which would provide at least three quality bikeways in the east-west and north-south directions that connect into the surrounding neighborhoods and the Vision Network (see Figure III-18), which would provide additional low-stress connections through downtown. Notable low-stress core network projects where there are no existing bike facilities include, the Waterfront Trail Embarcadero Bridge Connection at the San Francisco Bay Trail Terminus and the Embarcadero, which would become a Class I Shared Use Path. In addition, the Waterfront Trail A's Stadium Connector at Clay Street and Market Street and Water Street between Martin Luther King Jr. Way and Clay Street are both proposed for a Class I Shared Use Path. The 7th Street Bike Lane between Castro Street and Washington Street is proposed for a Class IV Separated Bikeway. Physical changes associated for the bicycle network project may require removal of travel lanes, conversions to two-way streets, changes from angled parking to parallel parking, streetscape improvements, and removal of parking. The City of Oakland's 2019 Let's Bike Oakland includes a number of changes to the bicycle facilities in the Plan Area. The facility changes include: Telegraph Avenue, 20th Street, Harrison Street, Martin Luther King Jr. Way, Clay Street, Franklin Street, Webster Street, and 27th Street. For a complete list of bicycle project list see Appendix B: Table M-4, Bicycle Project List, and for further discussion see *Section V.B, Traffic and Transportation*

c. Transit Network

As described, Downtown Oakland has three BART stations (19th Street Station, 12th Street Station, and Lake Merritt Station) that provide connectivity and support a large number of jobs, homes, and services. Amtrak located at Jack London Square and the Ferry Terminal also provide additional regional and statewide connectivity, as does the AC Transit bus system that services Oakland, and the larger Alameda County. Improvements to the surface transit network have a large potential to improve access and mobility within the Plan Area as well as increased connectivity to and from downtown. The Plan focuses on transit improvements that would enable AC Transit in partnership with the City of Oakland to reduce bus travel times, increase bus frequencies, ensure reliability, safety, and security for bus passengers, and reduce transit costs. Transit network improvements are shown on Figure III-19, and include addition of dedicated transit lanes, new transit centers, and new traffic signals. For a full list of network improvements see Appendix B: Table M-5, Transit Project List.

d. Vehicular Network and Parking

(1) Street Conversions

The Plan proposes conversion of one-way streets to two-way streets to ensure that all modes of transportation have dedicated space downtown, and that they would work together to provide a

The Oakland Athletics are currently proposing to relocate their ballpark to Howard Terminal. The unique nature of this proposed project may necessitate adjustments to this Bicycle Network to balance competing game-day demands on surrounding streets, including but not limited to Broadway, Market Street, Martin Luther King Jr. Way, Embarcadero West, and 3rd Street. While precise street segments on the Bicycle Network may change to accommodate these demands, high quality bicycle facilities to and from the ballpark will be incorporated in both the Howard Terminal project design and any revisions to the network envisioned herein to ensure safe and sustainable transportation to and from the waterfront.

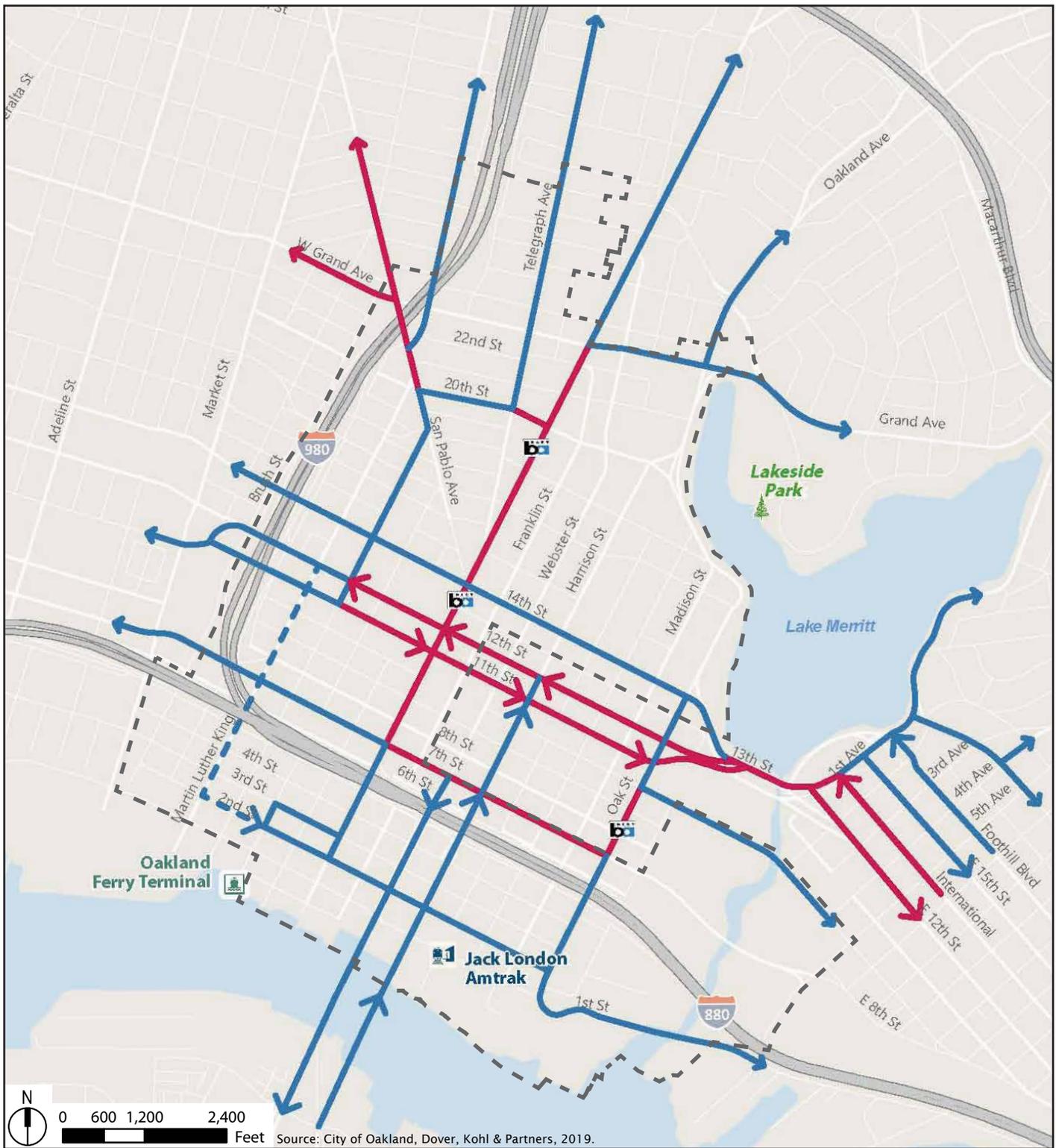


Legend

- Downtown Plan Boundary
- BART Station Locations
- Low-stress Short-Term Network
- Low-stress Vision Network
- Shared-use path
- Potential Shared-use path connection through Howard Terminal
- Proposed Estuary Crossing
- Existing Bike Lane (outlined in white)
- Existing Signed Route

Downtown Oakland Specific Plan EIR

Figure III-18
Proposed Low Stress Vision Bicycle Network



Legend

- Downtown Oakland Specific Plan Area
- ba BART Station
- Bus Transit Network
- Bus Priority Treatments
- ← One-Way Operations
- ← Transit Line Continuous
- ← Bus Transit Network (future)

Downtown Oakland Specific Plan EIR

Figure III-19
Proposed Bus Transit Network

more well-coordinated and safe-mobility network. Streets that have been identified for one-to two-way conversions are shown on Figure III-20 and listed in Appendix B: Table M-6. Priority streets for one-way to two-way conversions include 7th, 8th, 9th, and Franklin Streets. Other streets may be converted based on funding and other future opportunities. Physical changes associated with one-way to two-way conversion include potential changes in vehicle capacity; however, street vehicle capacity is not part of this CEQA analysis and is presented for informational purposes in *Section V.B, Transportation*.

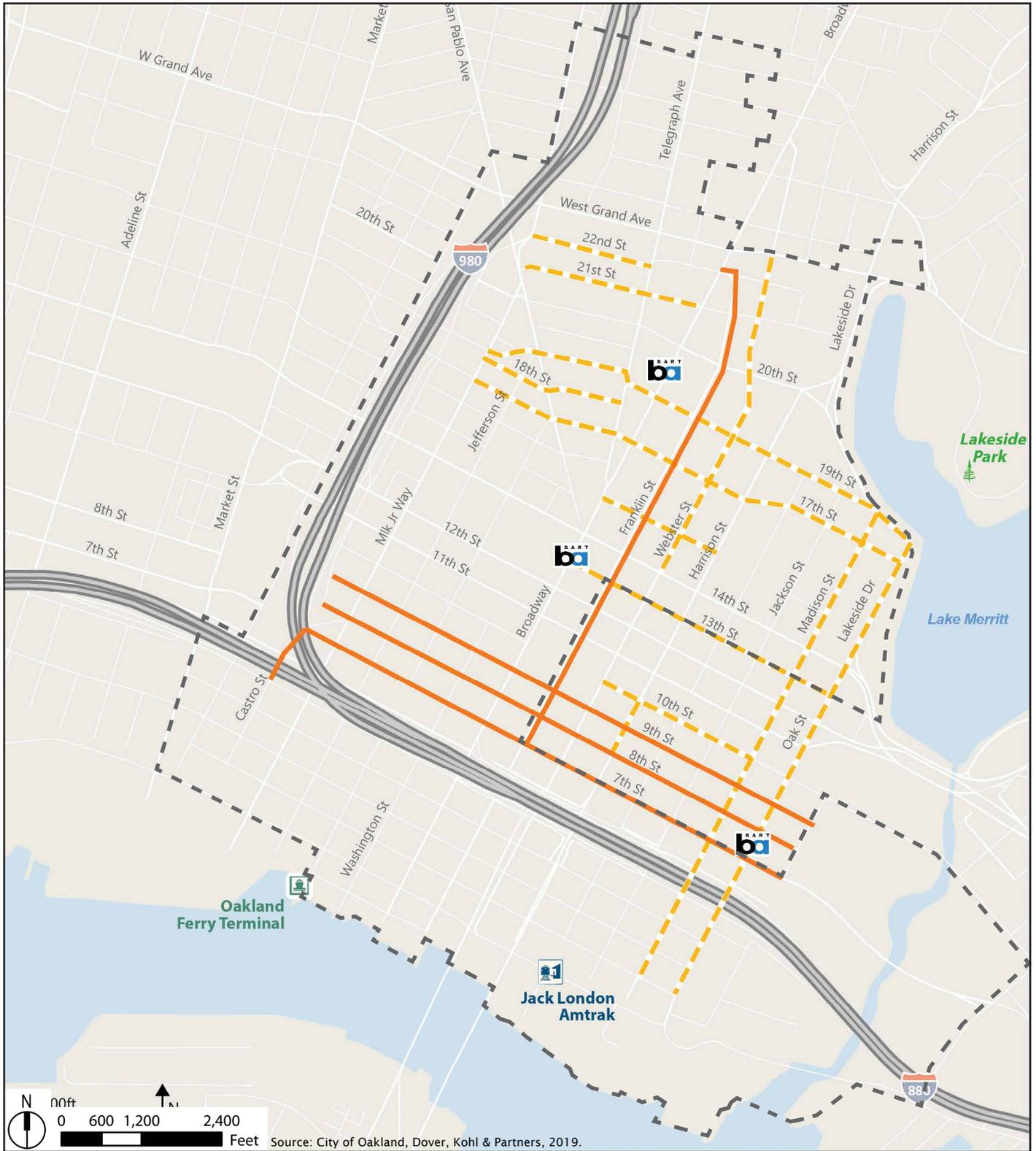
e. Complete Streets

The multimodal network recommendations for transit, bikes, pedestrians, and vehicles would require trade-offs, as there are several areas that overlap. There are a few corridors with competing mobility needs where modal priorities were determined based on safety, access, and community conversations. These are Broadway, Franklin and Webster Street, 7th/8th/9th streets, and Madison and Oak streets as shown on Figure III-21. These concepts would require a mix of two-way street conversions and two-way transit only lanes. Physical changes associated with these improvements include modal conflicts on corridors where both bicycle and transit infrastructure are proposed. Examples of street sections are shown in *Section V.B, Transportation*.

4. Public Realm Improvements

Streets represent one of the largest public realm resources in downtown. Figure III-22 locates potential public realm improvements including open spaces and streetscape improvements that have been envisioned in the Plan. In addition to specific projects/improvements, Figure III-22 also locates neighborhoods and downtown areas identified by the community as most in need of additional investment in public spaces. A comprehensive list of proposed streetscape improvements projects is included in Appendix B: Table CH-1 and summarized below:

- Implement “Green Loop” and “West Oakland Walk,” which are an integrated system of walking and biking paths between downtown neighborhoods and districts. The “Green Loop” links Lake Merritt, Channel and Estuary waterfront to street improvements along MLK Jr. Way and 20th street to form a continuous walking and biking loop surrounding downtown.
- The “West Oakland Walk” would connect the system of parks, schools, and historic sites along 14th Street and 18th/19th Street from Lakeside Drive downtown to Wood Street in Oakland.
- Create shared spaces that accommodate cars, bicycles, and pedestrians create a plaza-like experience that improves pedestrian connectivity and creates a new community event/gathering space.
- Implement new paseos for locations that have been identified as priorities in downtown: between 20th and 21st streets in Uptown, and between 24th and 25th streets in KONO.

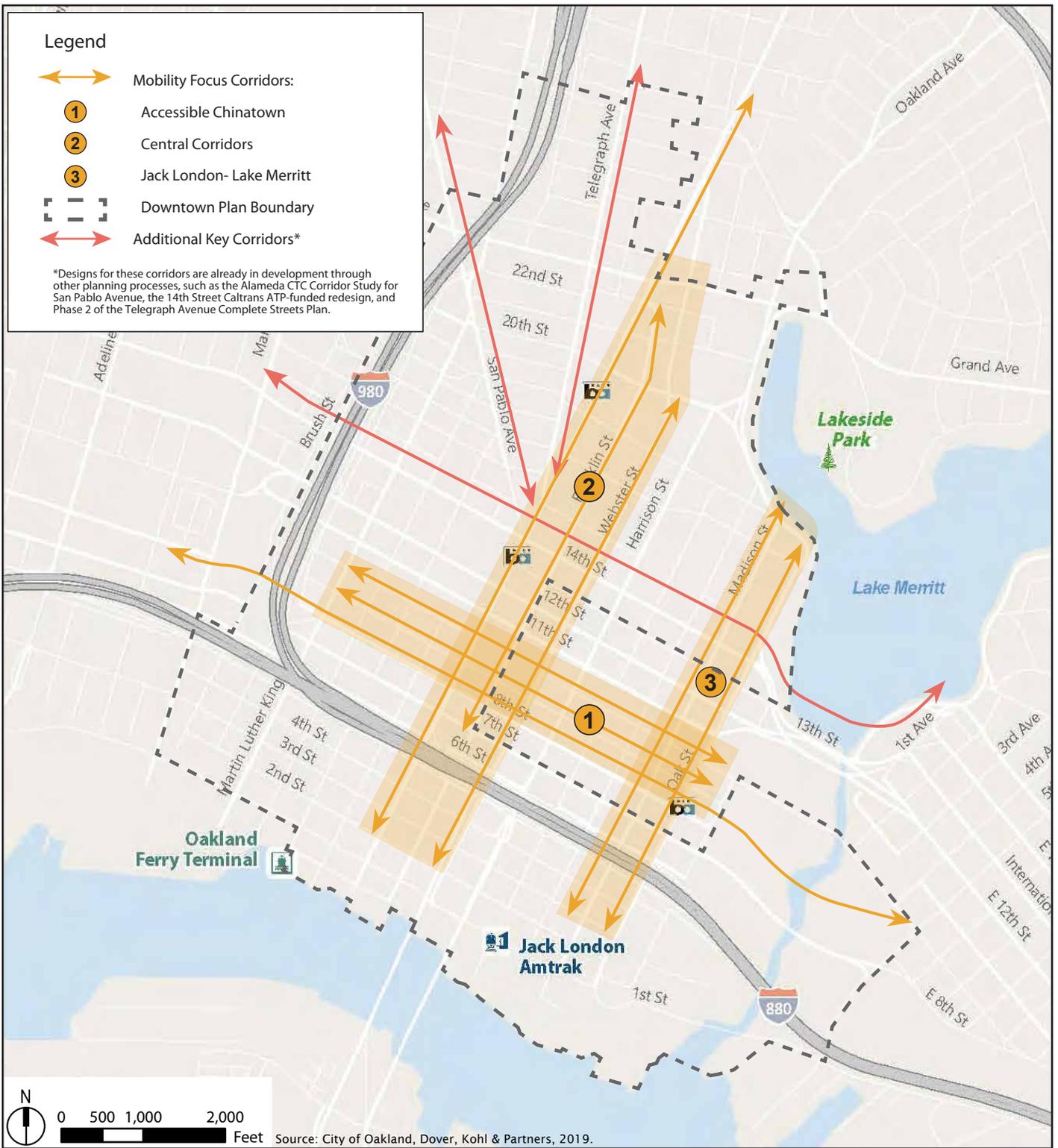


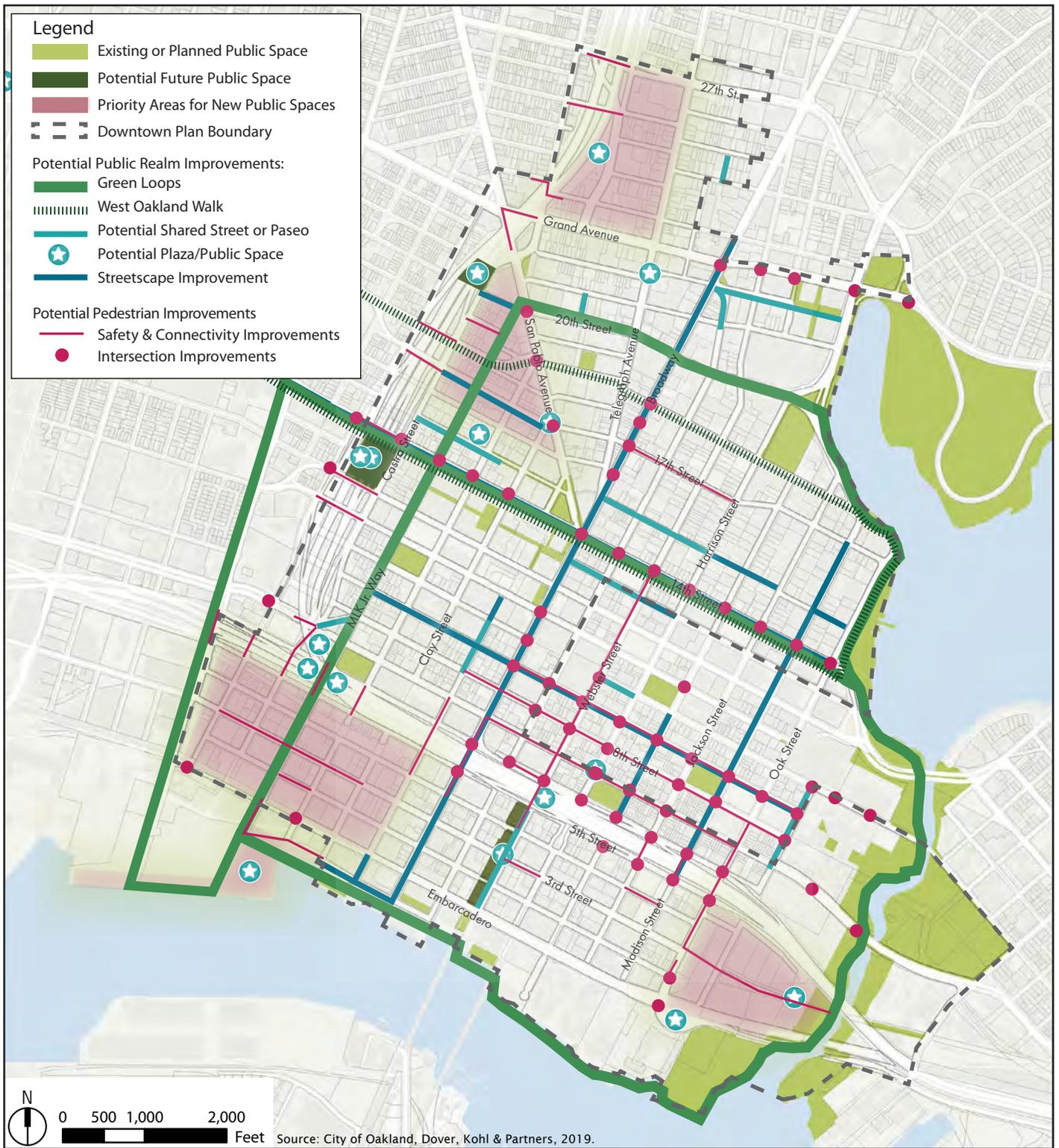
Legend

-  Downtown Oakland Specific Plan Area
-  BART Station
-  Priority Two-way Street Conversions
-  Potential Two-way Street Conversions

Downtown Oakland Specific Plan EIR

Figure III-20
Proposed Street Conversions





- Fill gaps in the urban street tree canopy to link plazas and green areas. Transform Webster Tube surface alignment into a greenway connecting downtown and Chinatown to the waterfront.
- Include new public open space as part of the redevelopment of the Victory Court Area.
- Provide public waterfront access at Howard Terminal with new paths and trails, and public open spaces, uses and amenities.

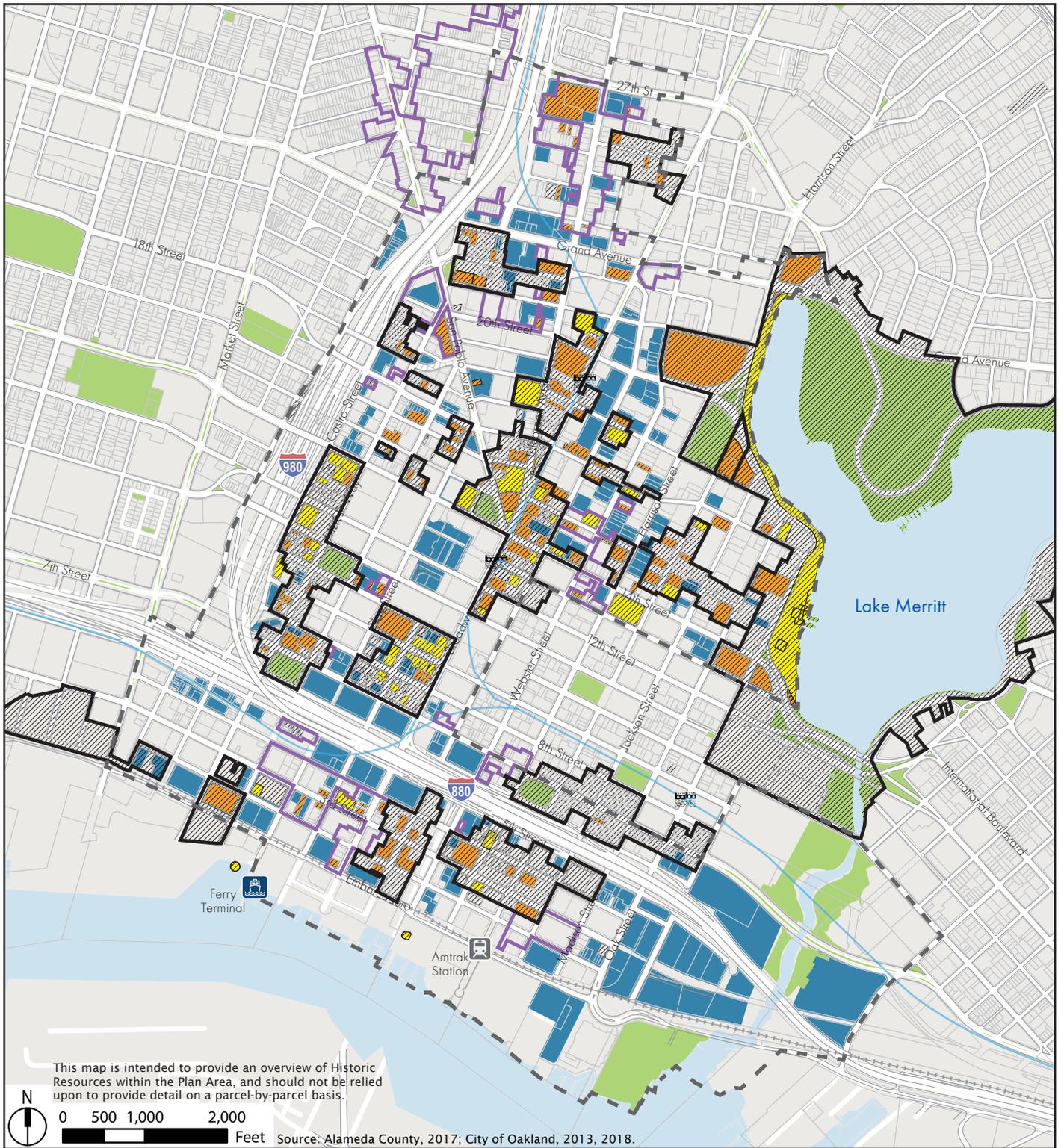
5. Historic Resources

The City of Oakland holds historic resources as an important value. In 1994, the City Council adopted a Historic Resources Element as part of the Oakland General Plan, further solidifying historic buildings and sites that have substantially contributed to the City's history and development. Downtown Oakland has a wealth of identified historic buildings and areas including designated City Landmark buildings, and Areas of Primary Importance as well as Areas of Secondary Importance. Figure III-23 locates the following historic resources:

The local, State and National Register of Historic Properties recognizes the city's most important buildings and districts, including designated Landmarks and Heritage Properties.

- Areas of Primary Importance are areas that appear eligible for the National Register of Historic Places, although not all are listed as historic districts.
- Areas of Secondary Importance are generally sites and districts of local interest.
- Potential Designated Historic Properties are all properties that meet minimum significance thresholds. The City considers any property that has at least a contingency rating of C ("secondary importance") or contributes to, or potentially contributes to, a primary or secondary district to "warrant consideration for possible preservation."

As Downtown Oakland continues to evolve, the Plan acknowledges that the identified historic resources are an important component of Oakland's urban fabric. Accordingly, the Plan proposes supportive policies, such as C-1.3 (adopt regulations to help preserve and adapt historic buildings downtown). The Plan proposes an update on the City's demolition findings. Further listings and discussions of historic and cultural resources as well as Plan policies related to cultural resources are discussed in *Section V.E, Cultural and Historic Resources*. In addition to historic resources, Downtown has a wide variety of civic organizations, local small business, community-based nonprofits, and other cultural resources. Existing and proposed cultural and entertainment areas are shown on Figure III-24.

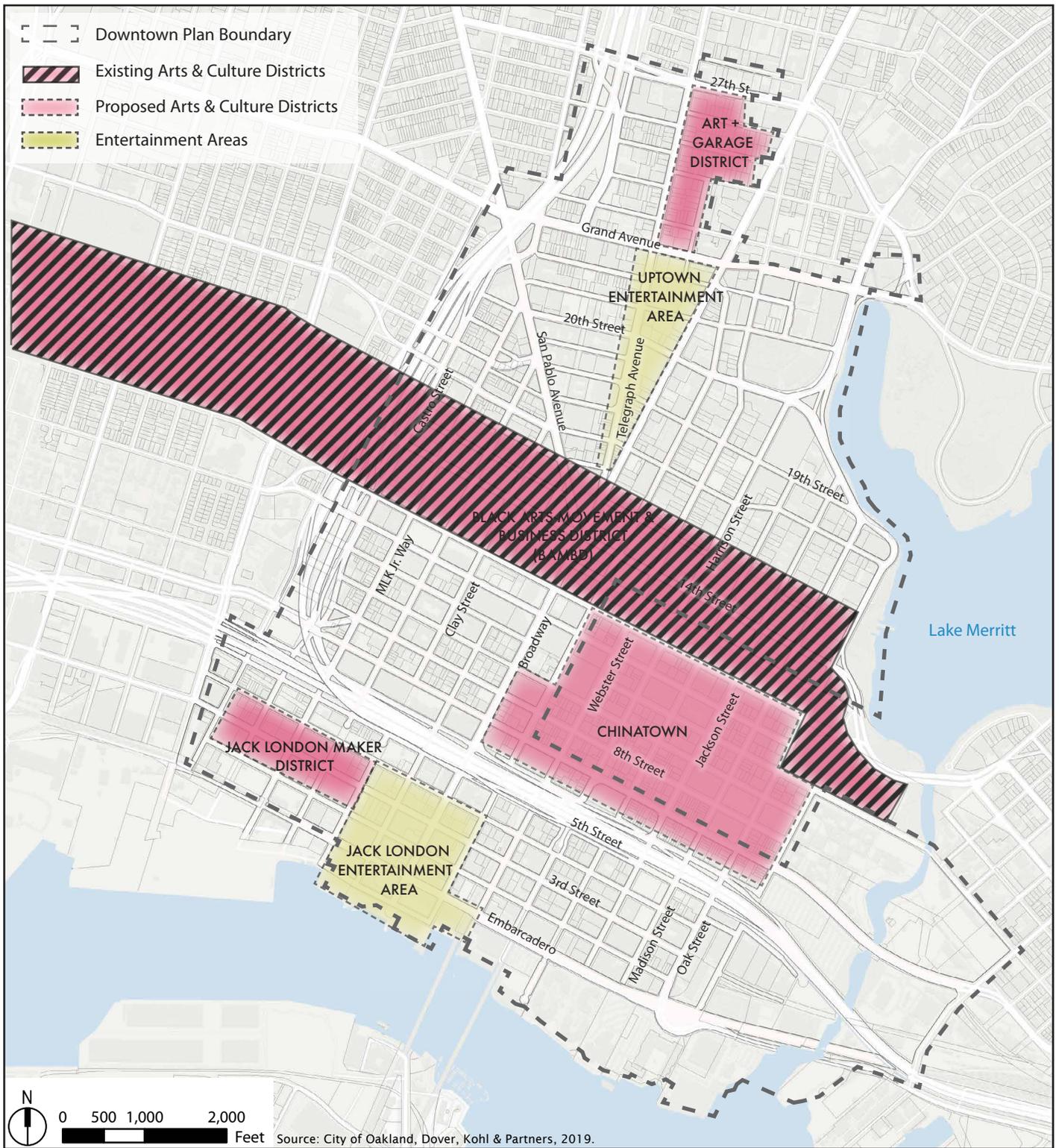


Legend

- Downtown Plan Boundary
- Parks
- Opportunity Sites
- City of Oakland Designated Landmark
- Rated 'A' or 'B' on Oakland Cultural Heritage Survey
- BART Station
- BART Line
- Areas of Primary Importance (API)
- Historic Resources per CEQA
- Railroad
- Areas of Secondary Importance (ASI)

Downtown Oakland Specific Plan EIR

Figure III-23
Historic Resources in the Plan Area



E. PROJECTED DEVELOPMENT PROGRAM

The Plan identifies a projected development program that represents the reasonably foreseeable development expected to occur in the Plan Area over the next 20 years and is thus the level of development envisioned by the Specific Plan and analyzed in this EIR.³

The reasonably foreseeable development assumed for the EIR analysis assesses what might be feasible based on a number of market factors, including market demand for various uses; broader regional economic and market conditions; backlog of approved or planned projects in the vicinity; recent development and business investment in the area; landowner intentions for their properties; and properties susceptible to change due to vacancy, dereliction, or absence of existing development. It is difficult to project the exact amount and location of future development with any precision. Through the established planning and environmental review and permitting process required for each individual development in the City and under the Specific Plan, the City would monitor actual development, associated within the study area, as the Specific Plan is implemented. As is shown above in Figure III-10, opportunity sites were identified to accommodate potential future development and redevelopment downtown. New development that is consistent with existing building trends, and that follows definitions and standards set in the Land Use Character (Figure III-6) and Intensity Maps (Figures III-7 and III-8) was then modeled for each opportunity site. Using the gross square footage extracted from these models and the assumptions outlined below, values for residential, commercial, industrial, and institutional square footage and employment was calculated, as shown in Table III-3.

Table III-4 shows the number of residential units, commercial, industrial, and institutional square footage and number of parking spaces that currently exist, are in active development through 2019, and are identified in the Specific Plan future development through 2040 and the new increase with active development and Plan Future Development through 2040).

Table III-5 presents the existing and assumed growth of population and employment in the Plan Area between 2010 (the base year for the analysis) and 2040 ("buildout year" or "planning horizons"). A certain amount of development and growth in the Plan Area would be expected to occur even without the implementation of the Plan. The existing commercial space can accommodate jobs for up to 68,665 total jobs.

While the CEQA analysis herein is based on the development quantities set forth in the Development Program, the intent of the Specific Plan and this EIR is to provide as much flexibility as is feasible in terms of the precise mix of newly developed land uses and their location within

³ The analysis prepared for this EIR is based on the Draft Downtown Specific Plan, dated August 2019.

TABLE III-3 DEVELOPMENT PROGRAM CALCULATION ASSUMPTIONS

	Gross to Net Area Factor	Average Unit Size	People	Parking	Occupancy Rate
Residents	80%	750 SF	1.9 Residents/Unit	0.25 space/unit	95%
Office	75%	3,000	225 SF/Employee	2,000 SF/Space	95%
Retail/Neighborhood Serving Commercial	75%	2,000	500 SF/Employee	2,000 SF/Space	95%
Flex	80%	2,000	1200 SF/Employee	3,000 SF/Space	95%
Other Non-Residential	80%	2000	1000 SF/Employee	3000 SF/Space	95%
Flex Industrial	90%	4,500	1,500 SF/Employee	4,000 SF/Space	95%
Institutional (SF)	75%	3,000	300 SF/Space	2000 SF/Space	95%

Note: SF = square feet

Source: Public Review Draft Plan, August, 2019.

TABLE III-4 DOWNTOWN BUILT SPACE AND FUTURE DEVELOPMENT BY LAND USE

	Existing Baseline ^a	Active Development (Through April 2019) ^b	Plan Future Development (Through 2040)	Net Increase with Active Development and Plan Future Development (Through 2040)
Residential (Units)	12,032	6,536	29,100	35,556
Total Commercial (SF)	23,039,803	7,263,840	20,060,000	27,863,840
Office	15,016,592	5,160,968	16,840,000	22,000,968
Retail ^c	8,023,211	1,683,826	2,330,000	4,013,286
Flex	N/A	419,046	890,000	N/A
Flex Industrial	1,788,992	-	260,000	260,000
Institutional (SF)	3,646,073	-	1,310,000	1,310,000
Parking (Spaces)	N/A	N/A	16,000	16,000

^a Existing Baseline refers to the amount of population, and employment within the Plan Area Boundary^b Active Development refers to any major project in the Downtown District listed on the Major Project List in any phase from pre-application to under construction (excludes complete projects) as of April 2019.^c Commercial Unspecified space has been classified as retail.

Sources: City of Oakland. City of Oakland Major Projects List. Copy of City of Oakland Housing Element Annual Progress Report Form FINAL, Laney College Facilities & Technology Master Plan Update, Shapefile, Last modified May 5, 2019.

TABLE III-5 EXISTING AND FUTURE DOWNTOWN POPULATION BY LAND USE

	Existing Baseline ^a	Active Development (Through April 2019) ^b	Plan Future Development (Through 2040)	Net Increase with Active Development and Future Development (Through 2040)
Residents	19,220	11,800	52,600	64,400
Total Employees	68,665	19,070	60,730	79,800
Office	47,553	16,400	53,400	69,80
Retail	11,433	2,400	3,400	5,800
Unspecified/Flex	N/A	270	570	840
Flex Industrial	1,020	N/A	160	1,180
Institutional	8,659	N/A	3,200	3,200

^a Existing Baseline refers to the amount of population, and employment within the Plan Area Boundary
^b Active Development refers to any major project in the Downtown District listed on the Major Project List in any phase from pre-application to under construction (excludes complete projects) as of April 2019.
 Source: Draft Downtown Specific Plan, August 2019.; City of Oakland. City of Oakland Major Projects List. Shapefile. Last modified May 5, 2019. Employment multipliers provided by Dover, Kohl and Partners.

the Plan Area while conforming to this CEQA analysis and thresholds. As the Plan Area develops, the City would track (1) the total number of residential units, hotel rooms, and non-residential square footage for which entitlements have been granted and building permits issued; and (2) the total number of residential units, hotel rooms, and non-residential square footage removed due to building demolition. The Plan allows for flexibility in the quantity and profile of future development.

A direct physical change to the environment is “a physical change in the environment which is caused by and immediately related to the project.” An indirect physical change in the environment is “a physical change in the environment which is not immediately related to the project, but which is caused indirectly by the project.” An EIR would only consider indirect effects if the change “is a reasonably foreseeable impact which may be caused by the project.” A change which is speculative or unlikely to occur is not reasonably foreseeable. Economic and social changes resulting from a project are not treated as significant effects on the environment and would only be relevant under CEQA if they would result in or would cause an adverse physical impact on the environment.

F. REQUIRED APPROVALS AND ACTIONS

1. City Approvals

The Specific Plan is intended to be adopted concurrently with amendments to the City's General Plan as well as the Oakland Planning Code. Implementation of the Specific Plan would require amendments to the General Plan and to the City of Oakland's Planning Code. These amendments are included as part of, and would be adopted at the same time as, the Specific Plan. Upon adoption, the objectives and policies contained within the Plan would supersede goals and policies in the General Plan with respect to the Plan Area. In situations where policies or standards relating to a particular subject are not provided in the Specific Plan, the existing policies and standards of the City's General Plan and Planning Code would continue to apply. The amendments would be made to both the General Plan and Planning Code to ensure that broad City policy and specific development standards are tailored to be consistent with the Plan. Projects would be evaluated for consistency with the intent of Plan policies and for conformance with the development standards which are tailored to be consistent with the Plan.

This EIR is intended to provide the information and environmental analysis necessary to assist the City in considering all the approvals and actions necessary to adopt and implement the Downtown Oakland Specific Plan. The following are anticipated actions/approvals concerning the Plan:

- **Certify the EIR** and make environmental findings and adopt a SCA and Mitigation Monitoring and Reporting Program pursuant to CEQA.
- **Adopt Specific Plan** and make required findings.
- **Amend General Plan** and associated maps to be consistent with the Specific Plan.
- **Amend Oakland Planning Code** text and maps to be consistent with the Specific Plan.

The City intends to use the streamlining/tiering provisions of CEQA to the maximum feasible extent, so that future environmental review of specific projects is expeditiously undertaken without the need for repetition and redundancy, as provided in CEQA Guidelines section 15152 and elsewhere. Specifically, pursuant to CEQA Guidelines Section 15183, streamlined environmental review is allowed for projects that are consistent with the development density established by zoning, community plan, specific plan, or general plan policies for which an EIR was certified, unless such a project would have environmental impacts peculiar/unique to the project or the project site. Likewise, Public Resources Code section 21094.5 and CEQA Guidelines Section 15183.3 also provide for streamlining for certain qualified, infill projects. In addition, CEQA Guidelines Section 15162-15164 allow for preparation of a Subsequent (Mitigated) Negative Declaration, Supplemental or Subsequent EIR, and/or Addendum, respectively, to a certified EIR when certain conditions are satisfied. Moreover, California Government Code

section 65457 and CEQA Guidelines section 15182 provide that once an EIR is certified and specific plan adopted, any residential development project, including any subdivision or zoning change that implements and is consistent with the specific plan is generally exempt from additional CEQA review under certain circumstances. The above are merely examples of possible streamlining tiering mechanisms that the City may pursue and in no way limits future environmental review of specific projects.

2. Other Agencies

Other agencies may be required to rely on this EIR for development in areas under their jurisdiction that are within the Plan Area including:

- **San Francisco Bay Regional Water Quality Control Board.** Granting of required clearances to confirm that all applicable standards, regulations, and conditions for all previous contamination at the site have been met.
- **Bay Air Quality Management District.** Compliance with BAAQMD Regulation 2, Rule 1 (General Requirements) for all portable construction equipment subject to that rule.
- **East Bay Municipal Utility District.** Approval of new service request and new water meter installations.
- **Alameda County Department of Environmental Health**
- **California Department of Toxic Substances Control.** Ensuring compliance with state regulations for the generation, transportation, treatment, storage, and disposal of hazardous waste.
- **California Department of Transportation (Caltrans).** Review and approval of plans, specifications, and estimates (including any equipment or facility upgrades) for modifications to intersections under the jurisdictions of Caltrans to accommodate signal timing changes.

IV. POLICY

In accordance with CEQA Guidelines Section 15125(d), this chapter describes potential inconsistencies between the Downtown Oakland Specific Plan (Specific Plan) ¹ and applicable local and regional planning documents. The documents reviewed in this chapter are listed below, including the initial adopted date. Many of the documents have subsequently been amended; any and all amendments that were approved prior to July 31, 2019 are considered in this analysis.

- Oakland General Plan Land Use and Transportation Element (1998) including:
 - 2019 Oakland Bike Plan (2019)
 - City of Oakland Pedestrian Plan Update (2017)
 - Broadway Valdez District Specific Plan (BVDSP) (2014)
 - Lake Merritt Station Area Plan (LMSAP) (2014)
 - West Oakland Specific Plan (WOSP) (2014)
- Oakland General Plan Estuary Policy Plan (EPP) (1999)
- Oakland General Plan Housing Element 2015–2023 (2014)
- Oakland General Plan Open Space, Conservation, and Recreation Element (1996)
- Oakland General Plan Historic Preservation Element (1994)
- Oakland General Plan Noise Element (2005)
- Oakland General Plan Safety Element (2004)
- Oakland General Plan Scenic Highways Element (1974)
- Central District Urban Renewal Plan (2012)
- Oakland Planning Code
- Citywide Industrial Land Use Policy (2008)
- Plan Bay Area 2040 (2017)

Policy conflicts in and of themselves are not considered to have significant effects on the environment and are differentiated from physical impacts identified in the other topical sections of this chapter. Pursuant to CEQA, the fact that a specific project does not meet all of a general plan's goals, policies, and objectives does not inherently result in a significant effect on the environment. In general, potential conflicts with applicable plans are considered by the decision-makers independently of the environmental review process. Inconsistencies that could result in physical impacts on the environment are analyzed in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures*. Additionally, local, regional, and State of

¹ The analysis prepared for this EIR is based on the Draft Downtown Specific Plan, dated August 2019.

California (State) plans and policies, such as those relating to air quality or water quality, are discussed in the applicable sections of this EIR.

City of Oakland plans and regional plans applicable to the Specific Plan are presented below, followed by a discussion of the Specific Plan overall consistency (or inconsistency) with each regulatory document. The specific plans evaluated in this chapter (i.e., the BVDSP, LMSAP, and WOSP) are included because they share a planning boundary with the Specific Plan, as shown in Figure III-2, in *Chapter III, Project Description*.

A. CITY OF OAKLAND

Plans, policies, elements, and codes that inform land use decisions in the City of Oakland are discussed below.

1. General Plan

The General Plan is a comprehensive plan for growth and development in Oakland. The General Plan comprises a series of elements that apply citywide, each of which deal with a particular topic. The Oakland General Plan contains eight elements: 1) Land Use and Transportation Element (LUTE) - which includes the Pedestrian Master Plan and Bicycle Master Plan; 2) Housing Element; 3) Open Space, Conservation, and Recreation Element; 4) Historic Preservation Element; 5) Noise Element; 6) Safety Element; 7) Scenic Highways; and 8) Estuary Policy Plan (EPP)) that provide goals, policies, and objectives for the physical development of the city.

Regarding a project's consistency with a general plan in the context of CEQA, the City of Oakland 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 with each other. 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 the California Environmental Quality Act (CEQA)" (City Council Resolution No. 79312 C.M.S.; adopted June 2005).

The Specific Plan's consistency and relationship with each applicable element of the General Plan is discussed below.

a. Land Use and Transportation Element

Land use in Oakland is primarily guided by the LUTE which includes Oakland’s 2019 Bike Plan, the City of Oakland Pedestrian Plan Update, the Estuary Policy Plan, the Broadway Valdez District Specific Plan (BVDSP), Lake Merritt Station Area Plan (LMSAP), West Oakland Specific Plan (WOSP), and the Coliseum Area Specific Plan. Figure IV-1 shows the Plan relative to the plan areas for the BVDSP, LMSAP, and WOSP, which are all adjacent to Downtown Oakland. The Downtown Oakland Specific Plan’s consistency with these plans is described below.

(1) LUTE

Overview

The LUTE, which was adopted March 24, 1998,² identifies policies for utilizing land in Oakland as change takes place and sets forth an action program to implement the land use policy through development controls and other strategies. The LUTE is bound by a vision for the city that includes creating “clean and attractive neighborhoods rich in character and diversity, each with its own distinctive identity, yet well-integrated into a cohesive urban fabric” in addition to “a diverse and vibrant downtown” and “an active and accessible waterfront that is linked to Downtown Oakland and the neighborhoods.”³ The LUTE also introduces a policy framework chapter that identifies specific policies related to industry and commerce, transit-oriented development, the downtown, the waterfront, and neighborhood activity centers.

The LUTE identifies Downtown Oakland as a showcase district, a designation intended to highlight downtown as “mixture of vibrant districts, each with a unique identity, all contributing to around-the-clock activity and continued expansion of job opportunities.”⁴ A key component of the General Plan LUTE vision is support for downtown growth in office activity and new housing. Goals listed in the LUTE downtown policy framework⁵ are as follows:

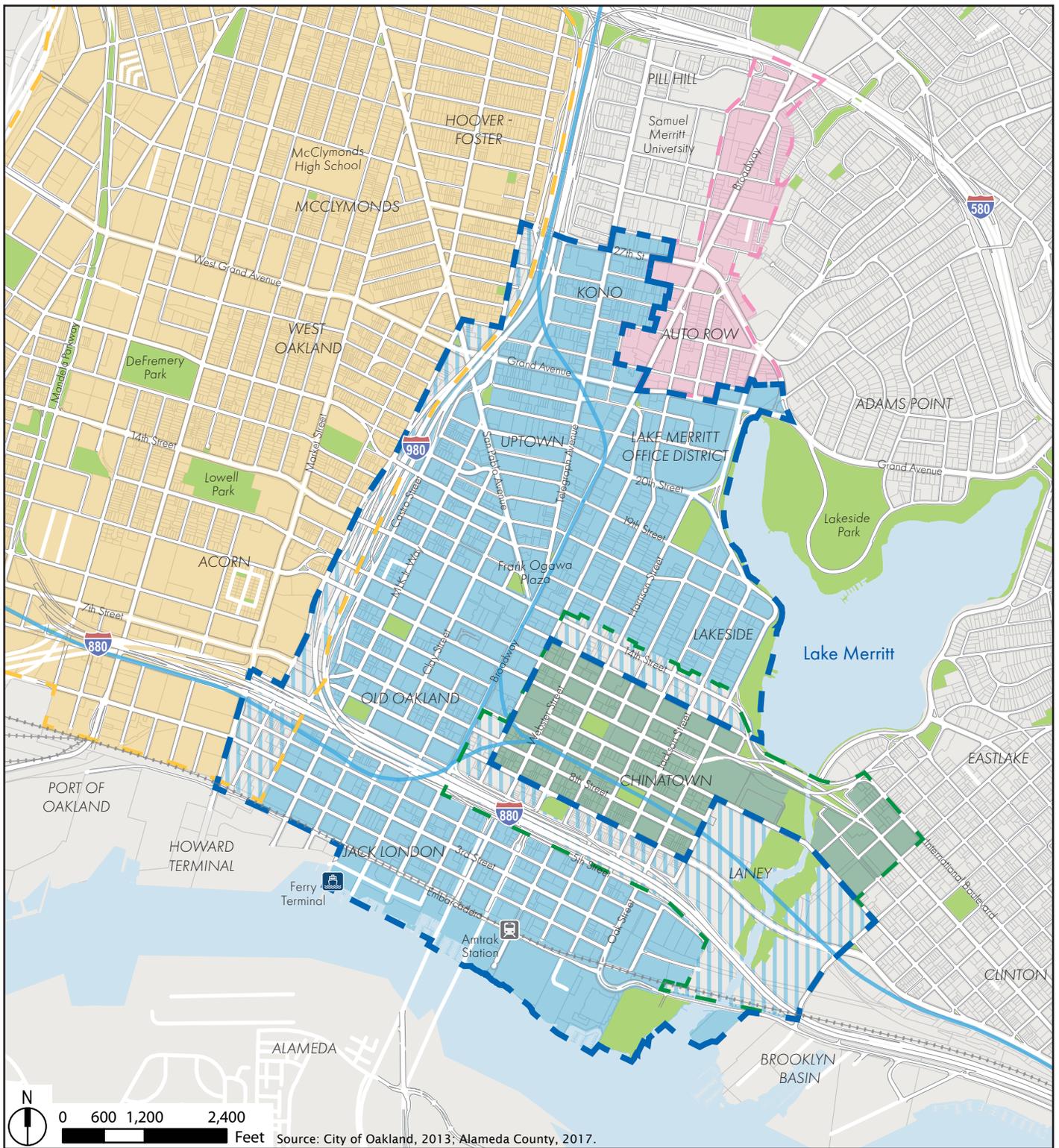
- To promote Downtown Oakland’s position as a dynamic economic center for the region.
- To serve as a primary communications, office, government, high technology, retail, entertainment, and transportation hub for Northern California.

² City of Oakland, 1998. Envision Oakland: City of Oakland General Plan, Land Use and Transportation Element, March.

³ Ibid, page 5.

⁴ Ibid, pages 52, 65.

⁵ Ibid, page 65.



Legend

- BART Line
- BART Station
- + + + + Railroad
- Parks
- Downtown Oakland Specific Plan Area
- Lake Merritt Station Area Plan
- West Oakland Specific Plan Area
- Broadway-Valdez Specific Plan Area
- ▨ Areas of overlap between Downtown Oakland Specific Plan and other Oakland specific plans

Downtown Oakland Specific Plan EIR

**Figure IV-1
Adjacent Specific Plans**

- To become a premier location in the region for urban residential living, by building upon existing neighborhoods, and by promoting and expanding a pedestrian-friendly, diverse and exciting range of housing, social, cultural, and arts opportunities.
- To further develop, support, revitalize, and promote the distinct, attractive urban character of each of the downtown districts, and to respect historic resources.

The LUTE also identified two transit-oriented districts in downtown around the 12th Street and 19th Street Bay Area Rapid Transit (BART) Stations to achieve the density and variety of development the LUTE envisions for downtown.

Consistency

The Specific Plan's goals are similar to those of the LUTE's; the Specific Plan emphasizes increasing economic activity, retaining and building housing, and preserving and emphasizing diverse cultural and arts opportunities. The Specific Plan's equity framework adds an additional goal to reduce racial disparities and displacement, which is consistent with the LUTE's discussion on social, economic, and environmental sustainability and its aim to "assure the fair treatment of people of all races, cultures, incomes, and educational levels with respect to development, implementation, and enforcement of laws, regulations, and policies."⁶

The Specific Plan proposes amending the General Plan land uses designations for 34 areas, as shown in Figure III-6 of *Chapter III, Project Description*.

As described in *Chapter III, Project Description*, the City is currently reviewing a proposed project to reuse the Howard Terminal site for a new baseball stadium, waterfront open space, and mixed-use development. If the Howard Terminal Option moves forward, the intensity of development in surrounding blocks would be adjusted so that there would be increased intensity for the area between Brush, Washington, 2nd, and 4th streets adjacent to Howard Terminal (#6, #18, and #19), and would require amending the General Plan land uses (as shown in Photo 1).



Photo 1- Proposed General Plan Amendments 3rd Street

⁶ Ibid, page 27.

Central Business District

The Specific Plan proposes to change several land use designations with the Core of the Central Business District, the Plan Area north of I-880 of parcels at the edges of the Plan Area boundary from LUTE Urban Residential and LUTE Community Commercial to Central Business District – 1 (CBD-1), as shown on Figure III-6 (#1, and #2 respectively). The Specific Plan proposes to also changes LUTE Community Commercial #3, LUTE Mixed Housing Type Residential #4 and LUTE Urban Residential to LUTE Central Business District 2. The Central Business District General Plan designation is intended to “encourage, support, and enhance the downtown area as a high-density mixed use urban center.”⁷ The desired character and uses in the Central Business District designation include “a mix of large-scale offices, commercial, urban (high-rise) residential, institutional, open space, cultural, educational, arts, entertainment, service, community facilities, and visitor uses.”⁸ The Specific Plan proposes to change the designations for two areas at the eastern edge of the Plan Area from Urban Residential and Mixed Housing Type Residential to Central Business District 2 which allows uses similar to what is allowed under the current designations (i.e., mixed-use, residential, and commercial uses), as shown on Figure III-6 (#4 and #5). The change to the Central Business District designation would, however, increase the allowed intensity of development. This does not present a conflict with the objectives or policies of the LUTE, which specifies that downtown should be “the focus of high density and intensity activities.”⁹ The impacts of these land use designation changes on population, housing, and services and utilities are analyzed in *Sections V.L, Population and Housing; V.M, Public Services, Facilities, and Recreation; and V.N, Utilities*, of this EIR.

In addition, the Plan proposes to change LUTE Central Business District to LUTE Central Business District- 3 (#29) from 10th Street to 14th from Clay to Franklin and up from 14th street to 19th street from Broadway to Franklin and from 19th street to Grand Avenue from Telegraph to Harrison as shown in Figure III-6. This designation change is largely centered in the central core and Lake Merritt Office District subareas.

Another change that is primarily a cleanup, is LUTE Urban Residential to Urban Park and Open Space (#30), because the existing zoning is open space and the General Plan should be consistent with the zoning.

⁷ Ibid, page 155.

⁸ Ibid.

⁹ Ibid.

Estuary Policy Plan Land Use Designations

See *Section B, Estuary Policy Plan*, in this chapter for more information on the EPP as a focused General Plan land use element that covers the majority of land south of I-880 and its relationship to the General Plan. The Specific Plan proposes modifications to several of the land use designations south of I-880 as shown in Figure IV-2 (#7 through #28 and #31 through #34) and in Table III-2. These General Plan Land Use Designation amendments primarily would result in increases in FAR and density as shown in Table III-2.

A further discussion of the amendment changes is included in *Section V.A, Land Use*.

The Specific Plan proposes to change the four blocks bound by 5th Street to the north, Castro Street to the east, Embarcadero West to the south, and Brush Street to the west from the LUTE's Business Mix designation to the EPP's Mixed Use District (MUD) designation (#6 and #17). The EPP MUD designation is intended to "encourage the development of nontraditional higher density housing (work/live, lofts, artist studios) within a context of commercial and light industrial/manufacturing uses"¹⁰ that are compatible with adjacent uses. The LUTE's Business Mix designation does not include residential uses, but both designations list light industrial, warehousing, manufacturing, and office uses under desired character.

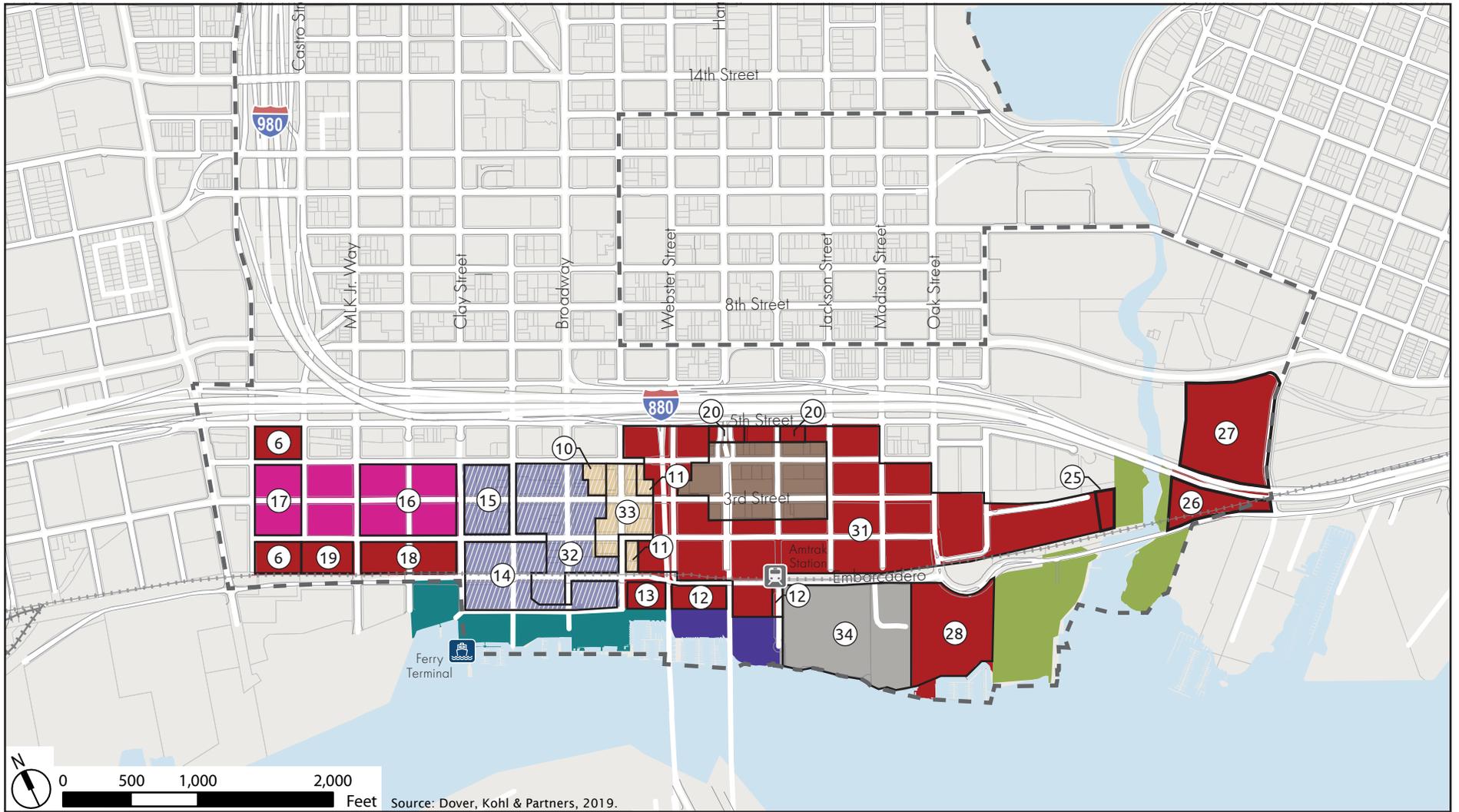
The LUTE views the downtown as a compilation of distinct districts and encourages planning that preserves and enhances the identities of the districts. The LUTE encourages live-work uses in the Jack London District.¹¹ The change from more traditional business uses in the Business Mix designation to a mix of uses with nontraditional housing types is consistent with the LUTE, a plan that includes policies to promote mixed-use development that supports local art and culture in commercial areas.¹² Therefore, the change to the EPP MUD designation, which allows art-focused housing options in addition to commercial development on these parcels, is consistent with the more general objectives and policies of the LUTE.

The EPP was adopted approximately one year after the initial LUTE adoption. It specifies the General Plan Land Use Designations for parcels within its boundaries, which the LUTE designated only as the Mixed Use Waterfront District. At the time of EPP's adoption in 1999, it included the area bounded by Adeline Street to the west, I-880 to the north, 66th Avenue to the east, and the

¹⁰ City of Oakland and Port of Oakland, 1999. *Estuary Policy Plan*, page 133, June.

¹¹ *Ibid.*

¹² City of Oakland, 1998. *Envision Oakland: City of Oakland General Plan Land Use and Transportation Element*, page 68, March.



Legend

- | | |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> Downtown Plan Boundary Railroad | <p>Estuary Policy Plan Land Use Designations</p> <ul style="list-style-type: none"> Mixed Use District Parks Produce Market Retail Dining Entertainment 1 Retail Dining Entertainment 2 Waterfront Commercial Recreation 1 Waterfront Mixed Use Waterfront Warehouse District Light Industrial 1 |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Downtown Oakland Specific Plan EIR

Figure IV-2
Proposed Land Use Designation Modifications - Jack London District

Oakland Estuary shoreline to the south. the EPP Land Use Designations govern the shoreline from Castro Street to East Creek Slough.¹³ As proposed, the Specific Plan would extend the EPP Land Use Designations to Brush Street, one block to the west of the existing boundary.¹⁴ This change from LUTE designations to EPP designations does not appear to be inconsistent with the LUTE or the EPP and would make the parcels' land use designations consistent with the rest of the Jack London District.

(2) Let's Bike Oakland, Oakland's 2019 Bike Plan

Overview

The Bicycle Master Plan (part of the LUTE) was first adopted December 7, 2007 and was updated and adopted by the City Council on July 9, 2019.¹⁵ It is the official policy document addressing the development of facilities and programs to enhance bicycling as a viable transportation choice in Oakland. The Bicycle Master Plan defines City policies and recommends actions that would encourage and support bicycle travel improvements. The 2019 Oakland Bike Plan (Let's Bike Oakland) updated the 2007 Plan's vision, goals, and policies with a focus on equity, engaged Oaklanders and empowered local community organizations to be leaders in the update, developed an action plan with performance measures for increasing the number of people who bike and reducing bicycle accidents. The action plan supports and expands existing community led programs to teach and support new and continuing bicyclists and implements the Let's Bike Oakland with a focus on equitable distribution of programs to support new and continuing bicyclists. The Vision Statement for Let's Bike Oakland is that Oakland will be a bicycle-friendly city where bicycling provides affordable, safe, and healthy mobility for all Oaklanders. New projects and programs will work to enhance existing communities and their mobility needs.

To develop Oakland as a bicycle-friendly community, the 2019 Oakland Bike Plan identified the following goals:

- *Goal 1 – Access*. Support increased access to neighborhood destinations such as grocery stores, libraries, schools, recreation centers, bus stops and BART
- *Goal 2 – Health and Safety*. Empower Oaklanders to live a more active lifestyle by providing a network of safe and comfortable bikeways for everyone to enjoy.

¹³ A Central Estuary Area Plan was adopted in 2013 to cover the estuary shoreline between 19th and 54th Avenues.

¹⁴ City of Oakland, 2019. General Plan. Available at: <http://www2.oaklandnet.com/government/o/PBN/OurServices/GeneralPlan/DOWD008821>, accessed February 8, 2019.

¹⁵ City of Oakland, 2007. Land Use and Transportation Element, Bicycle Master Plan. Adopted December 2007.

- *Goal 3 – Affordability.* Work to reduce the burden of housing and transportation costs on households.
- *Goal 4 – Collaboration:* Foster an increased role for the community in the planning process and impressed trust that the City will fulfill its promises.

Consistency

The Specific Plan is consistent with the goals of the 2019 Oakland Bike Plan. Specific Plan **Policy M-1.3** is to design and construct a low-stress bicycle network throughout the Plan Area. Table M-4 of the Specific Plan provides a list of bicycle projects that would implement the network. The Green Loop proposed in the Specific Plan would provide an integrated system of walking and biking paths that links downtown neighborhoods and districts, that connects people to the Lake Merritt and Estuary waterfronts and to adjacent areas outside of Downtown.¹⁶ The Specific Plan also includes policies to expand short- and long-term bike parking, update signal timing to support bicyclists, and reconfigure roads to dedicate space to bicyclists.

(3) Pedestrian Plan Update – Oakland Walks!

Overview

The 2017 Pedestrian Plan Update, *Oakland Walks!*¹⁷ builds off the Pedestrian Master Plan that was adopted as part of the LUTE in 2002. The 2017 Pedestrian Plan Update is intended to promote pedestrian safety and access to ensure that Oakland streets give everyone the opportunity to walk safely to their destinations. The 2017 Pedestrian Plan Update includes methodologies to prioritize safety improvements to Oakland’s High Injury Network, which are the streets where vehicular-pedestrian collisions occur most frequently.

The goals of the Pedestrian Master Plan include the following:

- *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.

¹⁶ City of Oakland, 2019. Draft Downtown Specific Plan, dated August.

¹⁷ City of Oakland Department of Transportation, 2017. *Oakland Walks! 2017 Pedestrian Plan Update.*

- *Vitality*. Ensure that Oakland’s pedestrian environment is welcoming, well connected, supports the local economy, and sustains healthy communities.

Consistency

The Specific Plan is consistent with the Oakland Walks! 2017 Pedestrian Plan Update, as it incorporates features that enhance and facilitate pedestrian access throughout downtown. The Green Loop and West Oakland Walk, as proposed in the Specific Plan, would link downtown to Lake Merritt, the Oakland Estuary waterfront, and surrounding neighborhoods via an integrated system of walking and biking paths. The Specific Plan also includes policies to design and construct safety measures along the high-injury pedestrian network identified in the 2017 Pedestrian Master Plan Update. The Specific Plan would implement pedestrian programs and policies in the Plan Area that were detailed in the 2017 Pedestrian Plan Update, as well Oakland’s Complete Streets Policies.

(4) Broadway Valdez District Specific Plan (BVDSP)

Overview

The Broadway Valdez District Specific Plan, adopted on June 17, 2014,¹⁸ provides a framework for future growth and development in an approximately 95.5-acre area along Oakland’s Broadway corridor between Grand Avenue and I-580. Building off retail enhancement studies, one of the primary objectives of the BVDSP is to transform the BVDSP area into an attractive regional destination that serves the region's shopping needs that captures sales tax revenue for reinvestment in Oakland. The BVDSP promotes increased housing densities in proximity to employment-generating land uses and includes design guidelines for future development that contributes to the creation of an attractive pedestrian-oriented district. The BVDSP emphasizes sustainability and presents a multi-pronged approach that integrates land use, mobility, and design strategies to achieve an economically, socially, and environmentally sustainable, mixed-use neighborhood. Buildout of the BVDSP represents 3.7 million square feet of development, including:

- 695,000 square feet of office space.
- 1,114,000 square feet of restaurant/retail space.
- 1,800 residential units.
- a new 180-room hotel.
- 4,500 new jobs.
- 6,500 parking spaces.

¹⁸ City of Oakland, 2014. Broadway Valdez District Specific Plan, June.

The actual applications filed, approved, building permits filed, projects under construction, and completed projects for the Broadway Valdez Plan is listed below. Because the EIR was flexible

- and allowed for automobile trips to be exchanged between uses, the number of residential units is higher than what was studied in the EIR as shown below: 99,000 square feet of office space.
- 365,172 square feet of restaurant/retail space.
- 3,355 residential units.
- 159-room hotel.

Consistency

The Downtown Oakland Specific Plan would be consistent with the BVDSP. The Specific Plan's focus on office and residential development would encourage and complement the BVDSP's position as a retail destination in Oakland. Furthermore, the Specific Plan's mobility policies would provide a stronger connection between the two areas. The Specific Plan's Green Loop would run east and west on Thomas L Berkeley Way, south of the BVDSP planning boundary, but easily connect to the BVDSP area via Harrison Street or Broadway. These connections are enhanced by the land use character map proposed in the Specific Plan. Near the Downtown Oakland Specific Plan and BVDSP boundary, a mixed-use pedestrian corridor of high intensity would run along Grand Avenue and a mixed-use pedestrian corridor of medium intensity would run along Telegraph Avenue, facilitating the mixed-use and pedestrian-oriented development envisioned in each plan.

(5) Lake Merritt Station Area Plan

Overview

The Lake Merritt Station Area Plan (LMSAP), adopted in December 2014,¹⁹ envisions a well-connected, economically diverse, and vibrant neighborhood and regional destination for the area around Lake Merritt BART Station. The LMSAP encompasses a 315-acre area and includes Chinatown, Laney College, the Oakland Museum of California, and the Alameda County Courthouse and offices. The LMSAP focuses on increasing jobs and housing in the LMSAP area, especially affordable housing and housing around the Lake Merritt BART Station. The LMSAP's economic development strategy focuses on growing local businesses, especially those in Chinatown; promoting commerce and jobs; and enhancing the area's appeal to visitors. Chinatown is celebrated as a cultural asset and regional community destination within the LMSAP.

¹⁹ City of Oakland, 2014. Lake Merritt Station Area Plan, December.

The LMSAP divides its plan area into seven plan districts, four of which border the Plan Area: 14th Street Corridor, Upper Chinatown, Chinatown Commercial Center, and I-880 Freeway Corridor. In the 14th Street Corridor Plan District, connectivity to downtown is emphasized and the LMSAP envisions new housing development and enhanced pedestrian and bicycle access. The Upper Chinatown District is identified as an urban area appropriate for more intense future development, including higher-density housing and retail, restaurant, commercial, and public uses. Strengthening and enhancing the Chinatown Commercial Center is a central part of the plan. The LMSAP includes a policy to ensure new development is sensitive to the historic context of the neighborhood and seeks to improve façades of existing buildings and streetscapes. Finally, in the I-880 Freeway Corridor, the LMSAP seeks to transform I-880 from a barrier to a connection to the Jack London District. The LMSAP includes policies to activate and improve the safety and comfort of I-880 under crossings. Full buildout of the LMSAP would include:

- 4,900 new housing units.
- Space for up to 4,100 new jobs, including:
- 404,000 square feet of additional retail space.
- 1,230,000 square feet of additional office space.

Consistency

The Downtown Oakland Specific Plan is generally consistent with the LMSAP. The Specific Plan intersects with most of the LMSAP's 14th Street Corridor District, two blocks of the LMSAP's Chinatown Commercial Center Plan District, the entirety of its I-880 Freeway Corridor District, and the entirety of its Laney/Peralta District. The Specific Plan does propose General Plan amendments in some of the intersecting areas (#23, #24, #25, #26, and #27 discussion below), including increases in the allowable FAR and density for #26 and #27 (see Table III-2 in *Chapter III, Project Description*).

In the LMSAP 14th Street Corridor District, the Specific Plan would increase allowable heights on parcels north of 13th Street. The block east of Franklin Street between 13th and 14th Street would increase from an existing allowable FAR of 8.0 to 17.0, density of 110 square feet per unit to 90 square feet, and height of 175 to 275 feet which is consistent with the LMSAP's goal of connecting 14th Street with the downtown as well as East Oakland. The development intensity for the blocks on this corridor heading east towards Merritt Lake would increase slightly from existing FAR ranges of 2.5-8.0 increasing to 7.5- 12.0 with similar density and height changes. (see Figure III-9, Proposed Draft FAR Change Areas, in *Chapter III, Project Description*). Densities along the same block would increase from 225 square feet per unit to 200 square feet per acre and height would stay the same with the exception of the block nearest Lake Merritt which would increase from 45 feet to 85 feet. This site was identified in the LMSAP as an opportunity site with an historic asset (the Fire Alarm Building) for reuse. The LMSAP suggested that the site should

include open space to preserve views to Lake Merritt and that the building should be reused, as stated in the following LMSAP Policy:

LMSAP LU-16: Fire Alarm Building Reuse. Promote the reuse of the Fire Alarm Building site (located between Oak Street, 13th Street, and Lakeside Drive) as a public amenity.

The increased height, density, and iFAR that the Specific Plan proposes does not further the LMSAP's vision for this parcel, but it does not directly conflict. Redevelopment of this parcel could increase the building's height while preserving the existing one-story building. Furthermore, increased height on this parcel could also activate the northern edge of the LMSAP area, which is part of the LMSAP's 14th Street Corridor District vision.²⁰

The Specific Plan would also increase the allowable height from 85 feet to 175 and 275 feet for small portions of the LMSAP's I-880 Freeway Corridor District and increase FAR in some areas directly north of and adjacent to the I-880 Freeway Corridor. Changes range from an existing FAR of 5.0 and one parcel of 12.0 to proposed FARs of 7.5, 12.0, and 17.0. Densities increase in this area from existing of 110 to 225 square feet per unit to 90, 110 and 200 square feet per unit. The majority of these increased height areas, increased FAR, and increased density areas are identified as opportunity sites in the LMSAP.²¹ Increased height and FAR on these sites would not conflict with the LMSAP's policies for the area, which include creating a safer and more connected I-880 Freeway Corridor District.

In the LMSAP's Laney/Peralta District, the Specific Plan would increase intensity for two areas near Laney College. These proposed increases in height, FAR, and density would be consistent with the LMSAP, which includes policies to create a hub of activity near Laney College (LMSAP Policies LU-41 and LU-42). The Specific Plan would maintain General Plan designations in the Laney/Peralta District and thus would not conflict with the LMSAP's vision of open space improvements that link Lake Merritt to the Oakland Estuary Channel waterfront.

The two plans are in sync with their visions of providing increased access to public space and improving streetscape and recreational conditions (Plan Policies CH-1.1, LMSAP OS-1, OS-2, OS-7). Both plans support development of the Webster Green public park (LMSAP OS-26) and propose methods for bolstering community and cultural engagement in the public realm (Plan Policies CH-1.11 and CH-1.9, LMSAP OS-23 and OS-24). The LMSAP identifies 14th, 10th, and 7th Streets as primary east-west and Oak Street as the main north-south "connections to open space" (LMSAP Fig. 5.2). The Specific Plan also identifies each of these roads as important pedestrian routes; however, it categorizes 10th and 7th Streets as secondary accessways. This

²⁰ Ibid, page 3-8.

²¹ Ibid, page 3-17.

differentiation between primary and secondary designations does not negate the feasibility or values of either Plan.

The Specific Plan does propose a General Plan amendment on portions of a few parcels to the west of the Lake Merritt Estuary between Embarcadero and 7th Street within the LMSAP. The land is currently developed with surface parking lots and the Oakland Fire Training Division and would change from Urban Park and Open Space to Central Business District 2 north of I-880 (#23) and from EPP Parks to EPP Mixed Use south of I-880 (#25) and from EPP Parks to LUTE Central Business District 2 (#24). The designations extend the existing swaths of Central Business District and EPP Mixed Use District areas about 150 feet east closer to the Lake Merritt Estuary. The Plan also proposes a General Plan Amendment on #26 and #27. Number 26 is currently EPP Planned Waterfront Development 1, which would become EPP Mixed Use District. Number 27 is currently LUTE Community Commercial and would become EPP Mixed Use District.

The Specific Plan proposes establishing a Cultural Districts Program to preserve, strengthen, and promote the City's cultural assets and diverse communities. The Specific Plan suggests that a Chinatown Cultural Heritage District could be one of the districts, and the proposed boundaries would encompass the LMSAP's Chinatown Commercial Center. The Specific Plan envisions culturally-specific street design and gateway elements to identify Chinatown and increased pedestrian and bicycle connectivity, consistent with the LMSAP. Mobility improvements outlined in the Specific Plan would provide streetscape amenities, lighting, street crossing improvements, and other traffic calming measures to provide active, pedestrian-oriented, well-lit connections to and from Chinatown on 8th Street, 9th Street, and Webster Street. The Specific Plan's Connectivity and Access Improvement Project List also includes improvements to connect the Lake Merritt BART Station and Chinatown to the Jack London District on Oak Street from 8th to 4th Street.

(6) West Oakland Specific Plan

Overview

The WOSP, adopted July 15, 2014,²² contains comprehensive, multi-faceted strategies for facilitating the development of selected vacant and/or underutilized commercial and industrial properties within the West Oakland community. The WOSP area covers approximately 1,900 acres and is generally bounded by I-580 to the north, I-980 to the east, and I-880 to the west. The WOSP envisions leveraging transit connections, maintaining historic neighborhoods, and revitalizing neighborhood commercial areas to create a culturally and economically diverse urban neighborhood in West Oakland. The WOSP includes policies to preserve industrial areas,

²² City of Oakland, 2014. West Oakland Specific Plan, July.

facilitate growth of the emerging industrial arts movement, improve environmental quality and safety, and facilitate land use compatibility where previous development patterns have resulted in conflicts between residential and industrial land uses. The WOSP proposes mobility improvements and land use strategies to better connect West Oakland and downtown.

Consistency

The Downtown Oakland Specific Plan is generally consistent with the WOSP. The Specific Plan would improve connectivity between Downtown Oakland and West Oakland through mobility improvements, such as the Green Loop and West Oakland Walk pedestrian and bicycle paths, and public realm west of San Pablo. The Specific Plan also includes a policy to study the feasibility of replacing I-980 with a multi-way boulevard, implementing overpass improvements, or capping I-980 with a park to better connect the two neighborhoods. The Specific Plan also celebrates the Black Arts Movement and Business District (BAMBD) on 14th Street between Lake Merritt and Wood Street in West Oakland. The Specific Plan includes policies to support the BAMBD and promote it through urban design elements, marketing materials, and economic programs.

The Specific Plan's western planning boundary would intersect with portions of the WOSP area between Brush Street and Martin Luther King Jr. Way and I-980 from I-990 to 27th Street in the Hoover/Foster neighborhood. The Specific Plan would intensify development in an area bounded by 27th Street to the north, I-980 to the east and south, and Martin Luther King Jr. Way to the west by increasing maximum allowable heights from 45 to 85 feet. The FAR would increase in this area from 4.5 to 7.5, and the density would increase from 300 square units per acre to 200 square units per acre. The Specific Plan would also increase the allowable height of development near the intersection of San Pablo Avenue and Grand Avenue from maximums of 75 feet to 85 feet. The FAR in this area would increase from 4 and 4.5 to 7.5. The areas of increased height, FAR, and density are to the northeast and southwest of WOSP Opportunity Site #37, which the WOSP envisions as a catalyst development site. The land use and development intensity changes proposed in the Specific Plan are consistent with the WOSP, which envisions San Pablo Avenue (Opportunity Area 4 in the WOSP) as a major commercial corridor with active ground-floor commercial uses and mixed-use residential development that connects West Oakland to downtown and to Emeryville. South of I-880 between Martin Luther King Jr. Way and Brush Street, the Specific Plan would re-designate parcels to focus light industrial uses along 3rd Street and provide a mix of uses on the periphery of the industrial core (i.e., along 4th Street and Embarcadero). The change in uses would not conflict with the WOSP, which envisions 3rd Street as an opportunity area that celebrates "its unique historic commercial and industrial structures" and welcomes light industrial uses that contribute to a high-quality environment.²³

²³ Ibid, page 2-5.

As mentioned above, the City is currently reviewing a proposed project to reuse the Howard Terminal site for a new baseball stadium, waterfront open space, and mixed-use development as another option for development near Howard Terminal. If the City approves this project and it moves forward, the intensity of development in the surrounding blocks could be adjusted. There would be increased intensity for the area between Brush, Washington, 2nd, and 4th streets adjacent to Howard Terminal and the following General Plan amendment changes: LUTE Business Mix to EPP Mixed Use District (#6), EPP Light Industry 1 to EPP Mixed Use District (#39), and EPP Off-Price Retail to EPP Mixed Use District (#18). Under this option, general plan amendments #17 and #18 would be replaced by #6 and #18. Under this option height, FAR and density would be more intense.

b. Estuary Policy Plan

(1) Overview

The EPP, adopted in 1999,²⁴ was initiated after the City's General Plan Goals, Objectives, and Policies report (1996) included a policy to study and plan the estuary portion of Oakland's waterfront and to provide more fine-grained land use designations. A large portion of the waterfront between Martin Luther King Jr. Way and Oak Street was designated as a Mixed-Use Waterfront District when the LUTE was adopted. Because the General Plan was adopted while the EPP was being developed, the General Plan LUTE specified that the Estuary Policy Plan would be integrated as part of the General Plan and would include more detailed land use designations that supersede the LUTE in designated areas south of I-880 to achieve the vision of a mixed-use waterfront.²⁵ The EPP presents policies and objectives related to land use, shoreline access and public spaces, and circulation. It envisions the estuary area as a mix of uses that build on the amenity of the waterfront and provide a strong connection with the downtown. The EPP is regulated by FAR.

The area identified as the Jack London District in the Specific Plan intersects portions of two EPP districts: the Jack London District (between Brush Street and Oak Street) and the Oak-to-Ninth Avenue District (between Oak Street and 5th Avenue). In the EPP's Jack London District, the EPP encourages commercial and residential land uses with intensity concentrated at Jack London Square and along the Broadway spine to create activity linking the waterfront to downtown. East of Broadway, the EPP encourages new residential development compatible with existing industrial use and character. Non-traditional higher density housing (e.g., work/live lofts and artist studios) are encouraged. The EPP directs retail uses west of Broadway within rehabilitated

²⁴ City of Oakland and Port of Oakland, 1999. Estuary Policy Plan, June.

²⁵ City of Oakland, 1998. Envision Oakland: City of Oakland General Plan Land Use and Transportation Element, Objective W8, page 93, March.

warehouses and new, lower-intensity construction. For the Oak-to-9th Avenue District, the EPP envisions a large-scale network of open spaces and economic development that would extend from Estuary Park to 9th Avenue (outside of the Plan Area). The EPP's development strategy also includes a Produce District to preserve and rehabilitate existing buildings around the Produce Market.

(2) Consistency

The Specific Plan is generally consistent with the EPP. The Specific Plan would revise existing General Plan (LUTE and EPP) designations in the Jack London District to (1) replace commercial and industrial designations with mixed-use districts; (2) maintain 3rd Street's existing industrial character by changing commercial designations to light industrial ones; (3) increase development intensity around Broadway, (4) eliminate the EPP Off-Price Retail designation; and (4) preserve the Produce Market. The Specific Plan's focus on establishing mixed-use districts, preserving the historic character of Jack London, and intensifying Broadway are all aligned with the EPP. The Specific Plan's intent to encourage new light industrial west of Clay Street conflicts with the EPP's original vision of off-price and home improvement retail stores. However, although the Specific Plan would eliminate the EPP's Off-Price Retail District, it is consistent with the EPP's vision to keep development west of Broadway at a lower intensity compared with the Central Core of downtown which includes much larger height limits and FAR limits.

East of Broadway, the Specific Plan focuses on Oak Street, which it envisions as a pedestrian-oriented corridor with shopfronts and active ground floor uses. The EPP identified the area between Oak Street and the Lake Merritt Channel as a mixed-use district with warehouse and industrial uses and higher density housing. Consistent with the EPP's policy for a mixed-use district, the Specific Plan prescribes infill buildings east of Broadway that would have flexible ground floor space for commercial uses, maker space, studios, and other light industrial uses with office or residential uses above. Consistent with the EPP, development pursuant to the Specific Plan near the waterfront would include new public spaces, mixed-use entertainment destinations, and waterfront activity that would enhance access to the waterfront. The Webster Green the Specific Plan envisions between I-880 and the estuary waterfront would provide greenspace, although not to the extent the EPP envisioned.

As described above, the area identified as the Jack London District in the Specific Plan intersects portions of two EPP districts: the Jack London District (between Brush Street and Oak Street) and the Oak-to-Ninth Avenue District (between Oak Street and 5th Avenue). Existing FARs between Brush and Webster north of the Embarcadero are 4.0. FARs in this area will range from 2.0 to 17.0, and densities have increased in these area as well. Proposed FAR for the majority of the Produce Market Area of Primary Importance (API) (see Figure V.E-4 in *Section V.E, Cultural and Historic Resources*) will increase from 1.0 to 2.5. Existing FAR between Webster and 5th Avenue north of the Embarcadero is 5.0. FARs in this area will slightly increase. FARs in the Waterfront

Warehouse API will largely stay the same with increases along the edges marginally from 5.0 to 7.5, and density will increase from 327 square feet per unit to 250 square feet per unit. The larger shift in intensity will occur east of the Waterfront Warehouse API near Victory Court.

Under the Howard Terminal Option, intensity of development in the surrounding blocks around Howard Terminal, such as from Market Street to Washington Street south of the 5th Street, will increase further.

c. Housing Element

(1) Overview

California Law (Government Code Section 65880) requires cities and counties to include as part of their General Plans a housing element to address housing conditions and needs in the community. Housing elements are prepared approximately every seven to eight years, following timetables set forth in the law. The housing element must identify and analyze existing and projected housing needs and “make adequate provision for the existing and project needs of all economic segments of the community,” among other requirements. The 2007–2014 Housing Element of the General Plan was originally adopted by the City Council on June 15, 2004. The City amended the General Plan to adopt Housing Element updates in 2010 and 2014. The current 2015-2023 Housing Element was adopted December 9, 2014.²⁶

On April 1, 2019, the City released the 2018 Housing Element Annual Progress Report. During 2018, citywide 4,044 housing units were proposed, 1,456 of which have been approved thus far. 5,673 units housing units were entitled and building permits issued for 9,706 housing units. Additionally, 687 housing units received certificates of occupancy and are open to tenants. This includes 46 housing units, 40 of which are income restricted, within the Plan Area boundaries. Of 16,066 housing units that have been entitled, started construction, or completed 7 percent are for very-low-income households, 5 percent for low-income, 0.4 percent for moderate-income, and 88 percent are market-rate.

The City’s Housing Element identifies current and projected housing needs and sets goals, policies, and programs to address those needs, as specified by the State’s Regional Housing Needs Allocation process (RHNA). Oakland’s State-mandated fair share of housing for the current housing cycle totals 14,765 housing units, including 2,059 units that are affordable to extremely- and very-low-income households, 2,075 for low-income households, 2,815 for moderate income households, and 7,816 for above moderate. The total remaining RHNA by income level includes 1,318 units for very low, 1,563 for low, and 2,749 for moderate. The Housing

²⁶ City of Oakland, 2014. 2015–2023 Housing Element Addendum to the 2010 Housing Element EIR.

Element identified 79 housing opportunity sites in the Downtown/Jack London Square (DJL) Priority Development Area (PDA), which is roughly equivalent to the Plan Area.²⁷ According to the zoning in place at the time of the most recent Housing Element adoption, the DJL PDA opportunity sites have capacity for 10,403 new housing units.²⁸

To meet Oakland's housing needs, the 2015–2023 Housing Element identified the following goals:

- *Goal 1:* Provide adequate sites suitable for housing for all income groups.
- *Goal 2:* Promote the development of adequate housing for low- and moderate-income households.
- *Goal 3:* Remove constraints to the availability and affordability of housing for all income groups.
- *Goal 4:* Conserve and improve older housing and neighborhoods.
- *Goal 5:* Preserve affordable rental housing.
- *Goal 6:* Promote equal housing opportunity.
- *Goal 7:* Promote sustainable development and smart growth.
- *Goal 8:* Increase public access to information through technology.

(2) Consistency

The Specific Plan is generally consistent with Housing Element policies and goals. Goal 2 of the Specific Plan is to ensure sufficient housing is built and retained to meet the varied needs of current and future residents. Goal 6 of the Specific Plan is to develop downtown in a way that meets community needs and preserves Oakland's unique character. Housing outcomes include a focus on addressing displacement and housing Oakland's artists and creative community. Such goals are aligned with the Housing Element's programs for affordable housing development and homeownership opportunities. Further, collectively the goals and policies of the Specific Plan serve to reduce vehicles miles traveled (VMT) for people who would otherwise be forced to live

²⁷ The DJL includes Howard Terminal, an area in the LMSAP south of Lake Merritt, and a small portion of the BVDSAP area. The DJL terminates at I-980 to the west, whereas the Plan Area continues one block farther west than I-980.

²⁸ City of Oakland Planning and Building Department, 2015. Table C-6 of the 2015-2023 Opportunity Sites Dataset, January 21. Note that the 2040 ABAG projections acquired from Aksel Olsen (Association of Bay Area Governments, Plan Bay Area 2040, PDA projections) indicate slightly different numbers for capacity for housing units. PDA counts come from a simulation model and can look different with each run, with differences being more noticeable for small PDAs.

further from transit-served urban areas. By increasing residential density downtown, near public serving transportation and jobs, the Specific Plan encourages an urban setting where people are encouraged to walk, bike, or take public transit as opposed to drive from greater distances that are not as close to transportation or the urban core.

The Specific Plan would permit residential development in some parts of the Plan Area where it is not currently allowed and provide for increased residential development potential through changes in allowable density and intensity of development. Changes in development standards would be implemented through zoning updates and/or a bonus incentive program. Development under the Plan would provide up to 29,080 new residential units in the Plan Area, including 4,350 to 7,250 new, income-restricted affordable units. The Specific Plan's increased density proposals are similar to the Housing Element Policy 2.3, which states that programs to permit projects to exceed the maximum allowable density set by zoning should continue to be refined and implemented. Finally, the Specific Plan includes policies to study an inclusionary housing policy and increased impact fee for downtown, thereby expanding the amount of affordable housing in the area or providing additional fees for affordable housing to the city. No inconsistencies have been identified between the Specific Plan and the Housing Element.

d. Open Space, Conservation, and Recreation Element

(1) Overview

The Open Space, Conservation, and Recreation (OSCAR) Element, adopted in June 1996,²⁹ addresses the management of open land, natural resources, and parks in Oakland. It is divided into four major chapters that discuss open space, conservation, recreation, and area plans. The citywide park acreage goal set by the OSCAR is 10 acres of parkland per 1,000 residents. The City's park ratio at the time the OSCAR was completed was approximately 7.5 acres of parkland per 1,000 residents.

(2) Consistency

The Specific Plan is generally consistent with the OSCAR Element as it fulfills the intent of enhancing open space in the Plan Area. The Specific Plan outlines specific open space improvements that could be realized in conjunction with the redevelopment of large opportunity sites, such as Lake Merritt Channel Park and Estuary Park along Victory Court or the Webster Green on top of the alignment of the underground Webster Tube. It also contains policies to draft and adopt guidelines for improved parks and open space and establish an edible parks program.

²⁹ City of Oakland, 1996. Open Space, Conservation, and Recreation (OSCAR): An Element of the Oakland General Plan, June.

e. Historic Preservation Element

(1) Overview

The Historic Preservation Element, adopted in 1994,³⁰ defines goals, objectives, policies, and actions that encourage preservation and enhancement of Oakland's older buildings, districts, and other physical environmental features having special historic, cultural, educational, architectural, or aesthetic interest or value.

(2) Consistency

The Specific Plan is consistent with Historic Preservation Element policies. The Specific Plan values the preservation and reuse of historic buildings as an essential element to maintaining community character. The Specific Plan includes policies to preserve and adapt historic buildings downtown, explore the development of an updated Transfer of Development Rights program to assist preservation efforts, and expand the City's online Cultural Asset map. The Specific Plan also proposes creating a Cultural Districts Program to establish new cultural districts. The Black Arts Movement and Business District (BAMBD) was the first adopted district. Potential additional districts could include a Chinatown Heritage District, Art & Garage District in Koreatown/Northgate (KONO), and a Jack London Maker District.

f. Noise Element

(1) Overview

The General Plan Noise Element (2005)³¹ is required to "analyze and quantify, to the extent practical, current and projected noise levels from the following noise sources: major traffic thoroughfares, passenger and freight railroad operations, commercial and general aviation operations, industrial plants, and other ground stationary noise sources contributing to the community noise environment." These noise levels are depicted on noise contour maps that are used to guide land use decisions to reduce noise impacts, especially on sensitive receptors. According to the Noise Element, sensitive receptors include "residences, schools, churches, hospitals, elderly-care facilities, hotels and libraries and certain types of passive recreational open space." The Noise Element also includes a land use/noise compatibility matrix that illustrates the degree of acceptability of exposing various sensitive land uses to noise.

³⁰ City of Oakland, 1994. Historic Preservation: An Element of the Oakland General Plan, March 8. Amended July 21, 1998.

³¹ City of Oakland, 2005. City of Oakland General Plan, Noise Element, March.

(2) Consistency

The Specific Plan proposes the establishment of cultural districts where Oakland's residents can express themselves and elements of their culture. The Specific Plan suggests that, to support these districts, "no complaint" zones could be established near industrial, maker, artist, and cultural activities.³² Residents in these zones would receive noise disclosures so that new residents acknowledge they are in housing near noise-generating arts and culture uses at various times of the day and night. It is noted that the Noise Element includes the following policy:

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.³³

Policy 3 is intended to help the City achieve two goals: (1) 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; and (2) to safeguard Oakland's economic welfare by mitigating noise incompatibilities among commercial, industrial, and residential land uses. The Noise Element's implementation steps for Policy 3 include actions to ensure new multi-family buildings have interior noise insulation and collaboration with Caltrans to implement sound barriers along roadways. The policy does not have any implementation actions related to situating sensitive receptors. Although the Specific Plan's "no complaint" zones would not help the City further achieve Policy 3, they would not directly conflict. The "no complaint" zones proposed in the Specific Plan are, like the Noise Element goals, intended to improve and maintain Oakland's quality of life. Given the complexities and sometimes-conflicting interests related to city management, it is common for there to be tensions and sometimes competing objectives across city policies.

New development in the Plan Area would have to be consistent with the City's Standard Conditions of Approval (SCAs) and mitigation measure regarding noise, thereby ensuring interior noise levels of new development meet the City's standards. However, the existing buildings near the cultural districts could experience increased noise levels. The Specific Plan policy recommendations are intended to encourage more arts uses in the Plan Area, pursuant to the Plan's **Goal 4: Allow diverse voices and forms of expression to flourish**. This potential inconsistency is identified here for informational purposes. The physical effects of the Specific Plan implementation on the environment are analyzed in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures*, and specifically, *Section V.K, Noise*, related to noise.

³² City of Oakland, 2019. Downtown Oakland Preliminary Draft Plan, page 206, January 16.

³³ City of Oakland, 2005. City of Oakland General Plan, Noise Element, page 25, June.

g. Oakland Safety Element

(1) Overview

Adopted in November 2004 and amended in June 2012, the General Plan Safety Element,³⁴ titled Protect Oakland, is intended to “reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from large-scale hazards.” The Safety Element addresses public safety, geologic hazards, fire hazards, hazardous materials, and flooding hazards. Given the topics addressed in the Safety Element, most of its policies generally apply citywide.

(2) Consistency

The Specific Plan is consistent with the Safety Element. The Specific Plan calls for implementing safety measures and infrastructure improvements to reduce conflicts between pedestrians, cyclists, and vehicles (including an active rail line in the Jack London District). It also prioritizes the movement of emergency services vehicles throughout downtown and supports the implementation of the City’s Sea Level Rise Roadmap to address flood risk. Crime Prevention through Environmental Design principles, active design standards, and increased “eyes on the street” through implementation of the Specific Plan are intended to decrease crime and increase safety and the perception of personal security. Individual development projects pursuant to the Specific Plan would be required to conform to all applicable safety regulations and requirements regarding construction, public safety, and hazardous materials.

h. Scenic Highways Element

(1) Overview

The Scenic Highways Element, adopted in 1974,³⁵ addresses the preservation and enhancement of Oakland’s distinctively attractive roadways and the visual corridors surrounding them. At the time of its publication, the Scenic Highways Element only discussed I-580 (which it refers to as the MacArthur Freeway) and Skyline Boulevard/Grizzly Peak Boulevard/Tunnel Road but specified that other roadways could be designated as official scenic routes in the future.

The entire length of I-580 within Oakland is identified as a designated scenic route in the Oakland General Plan. The reasons for this designation include the visually-appealing residential districts through which it passes; the contours of the drive, which echo the base of the Oakland hills; the

³⁴ City of Oakland, 2004. Protect Oakland: City of Oakland General Plan, Safety Element, November. Amended 2012.

³⁵ City of Oakland, 1974. Scenic Highway; An Element of the Oakland Comprehensive Plan, September.

views of undisturbed native hillsides and contrasting views of adjacent and more distant urban development; and its exemplary design and construction.³⁶

(2) Consistency

The Specific Plan is generally consistent with the Scenic Highways Element. I-580 does not pass through the Plan Area, but the Plan Area is visible from I-580 and views of the Plan Area have partially contributed to its designation as a scenic route. Buildout of the Specific Plan would create more high-rise residential and office buildings visible from I-580. These buildings would not block the highway's views of the hills. Instead, the Scenic Highways Element states that views of urban development offer a visual counterpoint to the hills and that taller buildings can "frame and highlight scenic vignettes."³⁷ For further discussion on scenic vistas and scenic resources, see *Section V.F, Aesthetics*.

2. Central District Urban Renewal Plan

(1) Overview

The Central District Urban Renewal Plan (Central District Plan)³⁸ is a redevelopment plan implemented by the Oakland Redevelopment Agency in accordance with California Community Redevelopment Law. The City adopted the Central District Plan on June 12, 1969, as the primary policy document to guide development in the Central District along with the LUTE. The Central District Plan was amended through April 2023 to be consistent with the General Plan.

The Central District Plan area covers 250 blocks and is bounded by the Embarcadero to the south, Lake Merritt to the east, 28th Street and Bay Place to the north, and I-980 to the west. Objectives of the Central District Plan include the following:

- Eliminate blight by strengthening the [Central District]'s role as an important office center for administrative, financial, business and government activities.
- Establish the project area as an important cultural and entertainment center.
- Re-establish residential areas for all economic levels.
- Restore historically significant structures.
- Facilitate economic development.

³⁶ Ibid, page 6.

³⁷ Ibid.

³⁸ Oakland Redevelopment Agency, 2012. Central District Urban Renewal Plan. Adopted June 12, 1969, as amended through April 3, 2012.

- Support transit-oriented development.
- Provide adequate infrastructure such as public parking, sidewalk, and traffic control.

The Central District Redevelopment Plan³⁹ puts forth development obligations and strategies for rehabilitation and acquisition of properties. It also includes policies related to affordable housing, housing replacement, and relocation of displaced persons that apply within the project area boundaries. Due to the changes in Redevelopment law passed in 2011, Redevelopment agencies have been eliminated. However, Redevelopment Plans and their regulations still apply, although the Central District Redevelopment Plan defers land use authority to the General Plan and Oakland Planning Code, which would include the Downtown Oakland Specific Plan.

(2) Consistency

The Downtown Oakland Specific Plan is generally consistent with the Central District Redevelopment Plan. Implementation of the Specific Plan would facilitate development of vacant or underutilized buildings, increase the housing stock for a mix of incomes, establish and enhance arts and cultural uses, and create and attract jobs with new office development. The Specific Plan has a focus on preventing displacement and includes policies to provide technical and financial support for arts organizations facing displacement, purchase and rehabilitate single-room occupancy (SRO) units as income-restricted affordable housing with supportive services, pursue additional funding to expand renter services and counseling, strengthen the Condominium Conversion Ordinance, and implement programs to assist homeowners at risk of foreclosure.

Development pursuant to the Specific Plan would add 29,100 housing units in the Plan Area. Under the Specific Plan's housing measures of success, up to 25 percent of the Specific Plan's projected housing production (7,275) would be income-restricted, affordable units. The Specific Plan does not provide as many affordable units as would have been required for the Oakland Redevelopment Agency to build under the Central District Plan, but due to the changes in California Redevelopment law, the Oakland Redevelopment Agency was eliminated in 2011. However, the Specific Plan is consistent with Community Redevelopment Law because at least 15 percent of all new or rehabilitated dwelling units developed pursuant to the Specific Plan are targeted as income-restricted units.

Depending on the mix of affordable housing income levels, projects with 15 percent affordable units are eligible for a 10 to 40 percent density bonus above the maximum allowable residential density under the City's General Plan and Planning Code standards for the S-15W zone (Gov. Code Sec. 65915(f)); (b) two concession/incentives (Id. at subs. (d)(2)(B)); and (c) waivers of

³⁹ City of Oakland, 2012. Central District Urban Renewal Plan, page 6, April.

development standards that would preclude development of the project at the bonus density (Id. at subs. (e)(1)). If all residential developments utilize the State density bonus, between 2,910 and 11,630 additional units may be constructed.

3. Planning Code

(1) Overview

The City of Oakland Planning Code (Planning Code)⁴⁰ implements the policies of the General Plan and other City plans, policies, and ordinances. The Planning Code divides the city into zones, each of which is assigned different land use and development regulations. These regulations direct the construction, nature, and extent of building use.

The majority of the Plan Area is within the Central Business District Zone, as shown in Figure IV-3. The Central Business District Zone branches into four zoning districts with slightly different standards, but the intent of all four Central Business District Zones is to:

- Encourage, support, and enhance the Central Business District as a high density, mixed use urban center of regional importance and a primary hub for business, communications, office, government, urban residential activities, technology, retail, entertainment, and transportation.
- Encourage, support, and enhance a mix of large-scale offices, commercial, urban high-rise residential, institutional, open space, cultural, educational, arts, entertainment, services, community facilities, and visitor uses.
- Enhance the skyline and encourage well-designed, visually interesting, and varied buildings.
- Encourage and enhance a pedestrian-oriented streetscape.
- Encourage vital retail nodes that provide services, restaurants, and shopping opportunities for employees, residents, and visitors.
- Preserve and enhance distinct neighborhoods in the Central Business District.

(2) Consistency

Overall, the Specific Plan is consistent with the goals and objectives of the Central Business District Zone as it would introduce high-density, large-scale office and housing development in the central core, improve pedestrian safety and connectivity, and honor the distinct

⁴⁰ City of Oakland, 2016. City of Oakland Planning Code. CEDA: Planning and Zoning. Available at: <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oako32032.pdf>, accessed February 12, 2019.

neighborhoods that make up the Plan Area through placemaking strategies and land use and development standards.

The Specific Plan would rezone certain parcels in the Plan Area, especially within the Jack London District where rezoning has not occurred in recent years. The rezoning in the Jack London District along Oak Street and Victory Court would be to conform with the Estuary Policy Plan Mixed-Use designation for those areas. The proposed rezonings do not represent a conflict with the Planning Code because the Planning Code's goal is to promote the achievement of the proposals, policies, and objectives of the Oakland General Plan.

As part of implementation of the Specific Plan, the City may consider the following provisions of the Planning Code to achieve plan goals. Proposed changes primarily relate to retaining and encouraging arts and cultural uses. Included in these potential strategies are the following:

- Establishing Cultural Districts in maker and art areas (e.g., Jack London District, KONO, and the Art + Garage District) to provide additional development controls to retain the district's character.
- Permitting flexible ground-floor space in arts areas to allow light industrial/production and/or office use in addition to retail-related uses so that custom manufacturers can make and sell their products.
- Allowing rooftop cultural spaces in the in KONO, Jack London, and the BAMBD districts to support arts and maker space.
- Providing Temporary Activity Permits to allow for pop-up arts uses for a predetermined period of time.
- Giving floor area ratio/height bonuses and incentives for the adaptive reuse and preservation of early 20th century production buildings in the Jack London and KONO areas.
- Reducing regulatory barriers to outdoor vendors in arts and culture districts, parks, and public gathering spaces in the Plan Area.
- Create a new "arts & culture" land use category and expand/ update categories for artisan, custom and light manufacturing, and other arts-related and culturally-significant uses.
- Require minimum gross floor area for arts, culture, and PDR uses in developments of a certain size to facilitate the creation of this space in certain areas.
- Noise disclosures so that new residents acknowledge they are in housing near noise-generating arts and culture uses.
- Restrictions on retail, office, bar, and/or restaurant street frontage (to limit competition for arts and culture space) in certain areas.

While the proposals above would change the Planning Code, they are not in conflict with its basic principles to provide compatible land uses, a healthy economy, and attractive, livable, and safe spaces.⁴¹

B. REGIONAL PLANS

1. Plan Bay Area 2040

a. Overview

Plan Bay Area, adopted July 26, 2017,⁴² is an integrated transportation and land use/housing strategy for the nine-county San Francisco Bay Area region through 2040. It is driven by the need to meet the growth forecasts identified for the region in a Sustainable Communities Strategy, prepared by the Association of Bay Area Governments and Metropolitan Transportation Commission. Plan Bay Area calls for 80 percent of the region's future housing to be in PDAs, such as the 803-acre DJL PDA.

b. Consistency

The Specific Plan's development strategy to locate high-density housing and office development near transit is consistent with the message of Plan Bay Area. The DJL PDA calls for 32,820 housing units by 2040. The DJL PDA calls for 111,370 jobs by 2040. While the Specific Plan currently projects 29,100 new housing units (more than what is remaining in the DJL PDA), and 60,730 new jobs (more than what is remaining in the DJL PDA), the additional housing units and jobs are not considered to be inconsistent with the goals of Plan Bay Area. For further discussion on implications of the Specific Plan's anticipated number of households provided in the development program comparative to both Plan Bay Area, and the City's General Plan, see *Section V.L, Population and Housing*. In order to meet Plan goals, the Specific Plan changes land use designations and zoning regulations to increase density near transit and proposes a development incentive program to provide increased building intensity near transit and/or where mixed-use workplace opportunity sites are present in exchange for pre-defined community benefits. The Specific Plan also identifies priority office sites near Downtown's BART stations. By locating employment centers near regional transportation hubs and allowing increased densities in strategic areas, the Specific Plan would work towards Plan Bay Area goals related to climate protection and adequate housing. The Specific Plan's equity and healthy community goals are also aligned with targets established in Plan Bay Area.

⁴¹ City of Oakland, 2019. Oakland Municipal Code Section 17.07.030 Purposes of zoning regulations.

⁴² Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2017. Plan Bay Area 2040, July 26.

V. SETTING, IMPACTS, STANDARD CONDITIONS OF APPROVAL, AND MITIGATION MEASURES

This chapter provides the analysis for each environmental topic determined to be potentially significant with regard to the Downtown Oakland Specific Plan. *Sections V.A through V.N* of this chapter describe the existing setting, the potential impacts that could result from implementation and buildout of the Specific Plan, the Standard Conditions of Approval (SCAs), and the mitigation measures designed to reduce the significant impacts of the project to a less-than-significant level.

The following provides an overview of the scope of the analysis included in this chapter, the organization of the sections, and the methods for determining which impacts are significant.

ENVIRONMENTAL TOPICS

The following environmental topics are considered in this chapter:

- (A) Land Use and Planning
- (B) Traffic and Transportation
- (C) Air Quality
- (D) Greenhouse Gas Emissions
- (E) Cultural and Historic Resources
- (F) Aesthetics
- (G) Biological Resources
- (H) Geology and Soils
- (I) Hazards and Hazardous Materials
- (J) Hydrology and Water Quality
- (K) Noise and Vibration
- (L) Population and Housing
- (M) Public Services, Facilities, and Recreation
- (N) Utilities

Chapter VI, Effects Found Not to Be Significant or Less Than Significant with Standard Conditions of Approval, includes a brief analysis of each environmental topic for which effects from the project were found to be either not significant or less than significant through the scoping process and preliminary review. These topics include: Agriculture and Forest Resources, Mineral Resources, Energy, and Tribal Cultural Resources.

FORMAT OF TOPIC SECTIONS

Each environmental topic section generally includes three main subsections: (1) Setting; (2) Regulatory Setting; and (3) Impacts (construction, project, and cumulative), Standard Conditions of Approval, and Mitigation Measures. Identified significant impacts are numbered and shown in **bold** type, and the corresponding mitigation measures are numbered and indented. Significant impacts and mitigation measures are numbered consecutively within each topic (in the order described above) and begin with a shorthand abbreviation for the impact section (e.g., AIR for Air Quality). The following abbreviations are used for individual topics:

LU:	Land Use and Planning
TRANS:	Transportation and Traffic
AIR:	Air Quality
GHG:	Greenhouse Gas Emissions
CULT:	Cultural and Resources
AES:	Aesthetics
BIO:	Biological Resources
GEO:	Geology
HAZ:	Hazards and Hazardous Materials
HYD:	Hydrology/Water Quality
NOISE:	Noise and Vibration
POP:	Population and Housing
PS:	Public Services, Facilities, and Recreation
UTIL:	Utilities

The following notations are provided after each identified significant impact and mitigation measure:

SU	= Significant and Unavoidable
S	= Significant
LTS	= Less than Significant

These notations indicate the significance of the impact with and without mitigation. All impacts that require mitigation measures and/or are SU are identified with bold impact statements.

DETERMINATION OF SIGNIFICANCE

Under CEQA, a significant effect is defined as a substantial or potentially substantial, adverse change in the environment.¹ Each impact evaluation in this chapter is prefaced by criteria of significance, which are the thresholds for determining whether an impact is significant. Appendix G of the State CEQA Guidelines provides thresholds which are incorporated into the City of Oakland Thresholds/Criteria of Significance Guidelines.² Appendix G was updated in December 2018 to reflect recent changes to the CEQA statutes and court decisions. Although, the City has not yet formally updated the Oakland thresholds, most of the recent changes and decisions are already reflected in the City's adopted thresholds (e.g., utilizing vehicle miles travelled (VMT) vs level of service (LOS)) and in cases that they are not, the City has been still addressing the revisions. In instances where the topics or questions in Appendix G are not reflected in the City's thresholds, the revisions are taken into consideration and discussed in the impact analysis for each relevant topic; even though the significance determination relies on the City's adopted thresholds.

The thresholds/criteria help clarify and standardize analysis and decision making in the environmental review process and which are used as a guidance in preparing environmental review documents for projects in Oakland. The City requires the use of these thresholds unless the location of the project or other unique factors warrants the use of different thresholds. The thresholds are intended to implement and supplement provisions in the CEQA Guidelines for determining the significance of environmental effects, including Sections 15064, 15064.5, 15065, 15382 and Appendix G, and to form the basis of the City's Initial Study and Environmental Review Checklist.

The City thresholds are intended to be used in conjunction with the SCAs (see discussion below), which are incorporated into projects regardless of the determination concerning a project's environmental impacts.

CEQA requires the analysis of potential adverse effects of the project on the environment. However, CEQA does not require that potential effects of the environment on the project be analyzed or mitigated as long as the project does not serve to exacerbate an existing environmental condition. Nevertheless, this document includes an analysis of potential effects of the environment on the project in order to provide information to the public and decision-makers. Where a potential significant effect of the environment on the project is identified, the

¹ Public Resources Code Section 21068.

² City of Oakland, 2013. CEQA Thresholds of Significance Guidelines, October 28 and City of Oakland, 2017. Transportation Impact Review Guidelines, April.

document, as appropriate, identifies City SCAs and/or project-specific non-CEQA recommendations to address these issues.

SUMMARY OF IMPACTS, STANDARD CONDITIONS OF APPROVAL, AND MITIGATION MEASURES

The analysis focuses on assessing what adverse impacts implementation of the Specific Plan and buildout and its associated development would have on areas within and adjacent to the Specific Plan. As an example, the analysis considers how the effects of the new development could potentially impact neighborhoods adjacent to the Plan Area including Chinatown and West Oakland. The analysis also considers how new development in the Plan Area may affect resources (protected under CEQA) within and adjacent to the Plan Area such as historic resources. To summarize, this EIR studies the impacts that implementation of the Plan and its associated development would have on 1) all areas surrounding the Plan Area (i.e., Chinatown, the estuary, West Oakland), and 2) areas within the Plan Area, for the following (as applicable to each environmental topic):

- **Plan and Associated Development + Existing Conditions (as of December 2018)** considering both construction and operational impacts.
- **Plan and Associated Development + Existing Conditions (as of December 2018) + Approved and Planned Development** considering both construction and operational impacts.

The City is currently reviewing a proposed project to reuse the Howard Terminal site for a new baseball stadium, waterfront open space, and mixed-use development, which is referred to as the Howard Terminal Option throughout this document. A discussion of the Howard Terminal Option is presented only where the impacts of the proposed project would be substantially different from the Plan. The Howard Terminal Option would increase intensity for the area between Brush, Washington, 2nd, and 4th streets, requiring additional General Plan amendments (see Photo 1 in *Chapter III, Project Description*).

CUMULATIVE ANALYSIS CONTEXT

CEQA defines cumulative as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.” Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts when the project’s incremental effect is cumulatively considerable. “Cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects

of probable future projects. These impacts can result from a combination of the proposed project together with other projects causing related impacts. "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects."³

The methodology used for assessing cumulative impacts typically varies depending on the specific topic being analyzed. For example, the geographic and temporal (time-related) parameters related to a cumulative analysis of air quality impacts are not necessarily the same as those for a cumulative analysis of noise or aesthetic impacts. This is because the geographic area that relates to air quality is much larger and regional in character than the geographic area that could be impacted by potential noise or aesthetic impacts from a proposed project and other cumulative projects/growth. The noise and aesthetic cumulative impacts are more localized than air quality and transportation impacts, which are more regional in nature. Accordingly, the parameters of the respective cumulative analyses in this document are determined by the degree to which impacts from this project are likely to occur in combination with other development projects.

UNIFORMLY APPLIED DEVELOPMENT STANDARDS AND CONDITIONS OF APPROVAL

As stated previously, the SCAs are incorporated into projects regardless of the environmental determination. As applicable, the SCAs are adopted as requirements of an individual project when approved by the City, and they are designed to (and do) substantially mitigate environmental effects. For the proposed project, all relevant SCAs have been incorporated as part of the project.

In reviewing project applications, the City determines which SCAs are applied, based on zoning district, community plan, and the type(s) of permit(s)/approvals(s) required. Depending on the specific characteristics of the project type and/or project site, the City determines which SCAs apply to a specific project; for example, SCAs related to creek protection permits are only applied to projects on Creekside properties.

Because these SCAs are mandatory City requirements, the impact analysis assumes that they will be imposed and implemented by the project. If a SCA would reduce a potentially significant impact to less than significant, the impact is determined to be less than significant, and no mitigation is imposed.

³ CEQA Guidelines Section 15355(b).

The SCAs incorporate development policies and standards from various adopted plans, policies, and ordinances (e.g., the Oakland Planning and Municipal Codes, Stormwater Water Management and Discharge Control Ordinance, Oakland Tree Protection Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System permit requirements, California Building Code, and Uniform Fire Code), which have been found to substantially mitigate environmental effects. Where peculiar circumstances associated with a project or project site would result in significant environmental impacts despite implementation of the SCAs, the City determines whether feasible mitigation measures exist to reduce the impact to less-than-significant levels.

A. LAND USE AND PLANNING

This section analyzes how the Specific Plan and its associated development may impact existing and planned land uses within, and in the vicinity of, the Plan Area including, but not limited to Chinatown, which is primarily within the Lake Merritt Station Plan Area but surrounded on three sides by the Plan Area as shown in Figure III-2 in *Chapter III, Project Description*. The existing and planned land uses and patterns in and around the Plan Area are described below, as well as an assessment of whether implementation of the Specific Plan and the reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would result in significant land use impacts. Specific Plan policies and City Standard Conditions of Approval (SCAs) that would reduce potential air quality impacts are identified. No additional mitigation measures were determined necessary.

The Specific Plan's relationship to relevant planning policies is provided in *Chapter IV, Policy*.

1. Setting

The Plan Area encompasses approximately 930 acres in Downtown Oakland and is generally bounded by 27th Street to the north; Interstate (I-) 980, Brush and Market Street to the west; the Jack London estuary waterfront and Embarcadero West to the south; and Lake Merritt and the Lake Merritt Channel to the east.

It spans west from I-980 to Lake Merritt, Chinatown, and Brooklyn Basin; north to include the Koreatown/Northgate (KONO) neighborhood; and south to include the Jack London District and Laney College area, as shown in Figure III-1 in *Chapter III, Project Description*. I-880 separates the Jack London District from the rest of the Plan Area as shown in Figure III-3 in *Chapter III, Project Description*.

The Plan Area is surrounded by several other planning areas including the Broadway Valdez District Specific Plan (BVDSAP) to the north (EIR published in 2014), Lake Merritt Station Area Plan (LMSAP) to the east (EIR published in 2014), and West Oakland Specific Plan (WOSP) (EIR published in 2014) to the west, also shown in Figure III-2 in *Chapter III, Project Description*.

Regional freeway access to the Plan Area is provided by I-580 and I-980, and State Route 24. Bay Area Rapid Transit (BART) provides regional transit service to the area, with the 19th Street and 12th Street BART Stations located within the Plan Area boundary in the transit-oriented Central Core and Uptown sub-area, respectively. The Lake Merritt BART Station is located adjacent to the Plan Area boundary on 8th Street and Oak Street. In addition to BART, the Alameda-Contra Costa Transit District (AC Transit) provides frequent bus service along Broadway, with the busiest segment in the AC Transit system on Broadway between 11th Street and 20th Street with up to 40 bus trips per hour per direction on weekdays.

a. Land Uses

(1) Land Uses within Plan Area

A variety of land uses are located throughout the Plan Area representing the following categories: office use, institutional, retail/entertainment; convention and visitor use, residential; industrial; open space, and residential, as shown in Figure V.A-1. In addition, a map of the Planning Sub-Areas is shown in *Chapter III, Project Description* (Figure III-3).

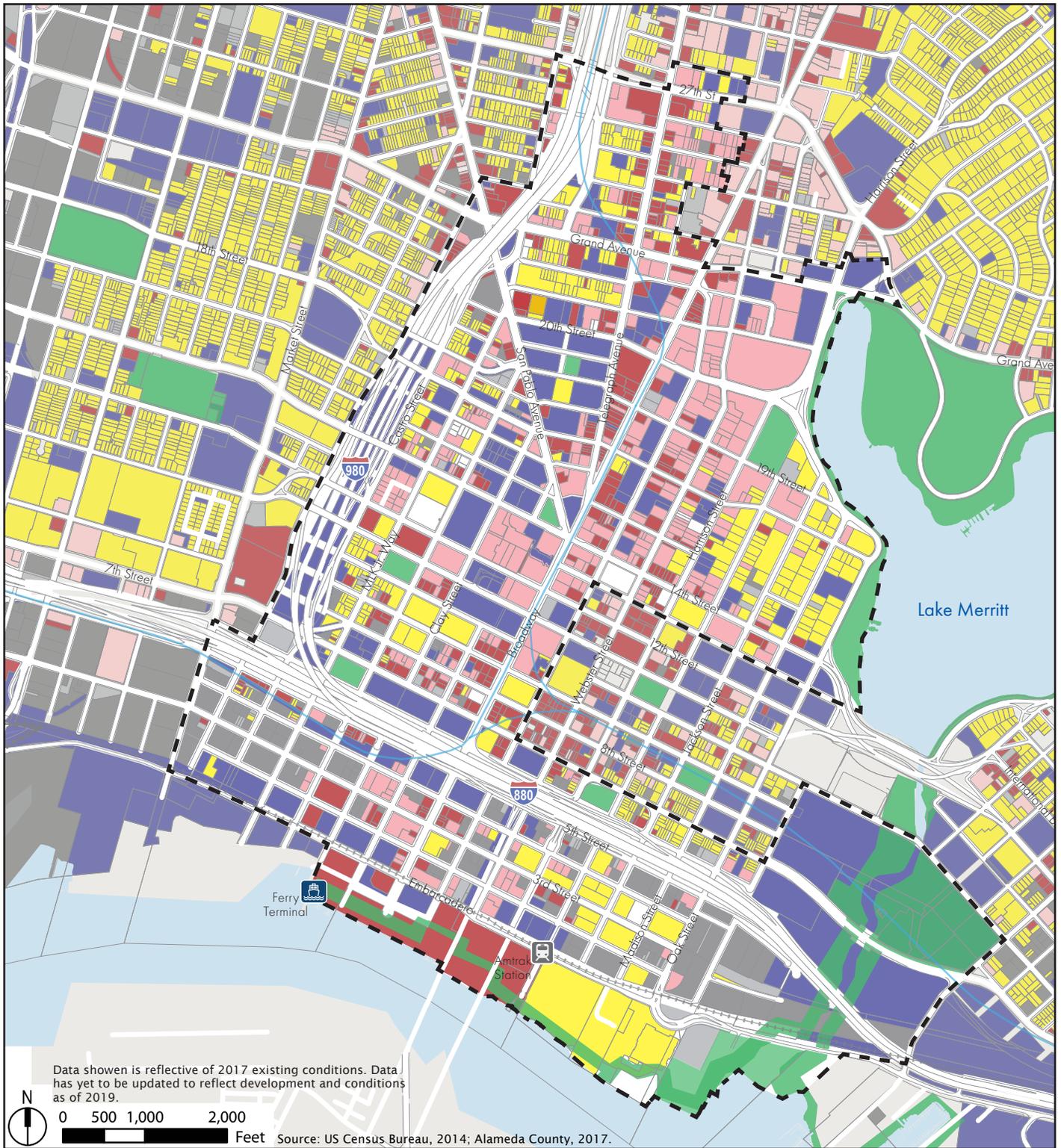
Uses in the Central Core are primarily commercial and office, as well as some hotels. The Lake Merritt Office District consists mostly of office as well. Uptown contains a mix of uses including high-rise office and institutional buildings and residential buildings. Koreatown/Northgate includes a scattering of mid-rise residential and smaller-scale production buildings which establish a unique character in the historic 25th Street Garage District. West of San Pablo includes an eclectic mix of modern looking apartment buildings and Victorian homes. Lakeside consists of mostly residential, institutional, and cultural uses. Old Oakland includes many historic buildings and residential with large scale civic buildings. Laney College is comprised of institutional uses. The Jack London District includes a mix of uses from residential to industrial to retail and commercial uses.

The descriptions below present more thorough examples of the specific uses that are present within, or in the vicinity of, the Plan Area.

Office and Institutional Uses

The Central Core, centered along 14th Street and Broadway, contains a dense transit corridor and serves as a hub for workplaces, retail, and services. Within the Central Core are medium to large building footprints. In addition to the Central Core, the Lake Merritt Office District area also contains much of Downtown's office space. Downtown Oakland is the largest and most concentrated job center in the East Bay. Public sector jobs account for nearly one-third of all downtown employment with the Federal Building, State Building, City Hall and other City office buildings, and the post office all located in the Central Core. Other jobs in downtown include professional, scientific, and technical-services jobs.

Old Oakland is comprised of historic buildings, residential communities, small shops, and businesses. There is a concentration of historic buildings along 9th Street. There are also large-scale buildings with civic uses including the Oakland Police Department Administration Building, County Courthouse, and Detention Center. These large developments are a contrast to the Old Oakland street grid, bisected by the I-880 freeway and together these buildings and I-880 create a barrier between Old Oakland and the Jack London District. Preservation Park is a distinctive Victorian office development in Old Oakland that spans two blocks and is located between 14th and 12th Street near Castro Street.



Legend

- Downtown Plan Boundary
- Public Facility or Institutional
- Industrial
- Residential
- Retail
- Open Space
- Commercial/Office
- Vacant
- BART Line
- + Railroad

Downtown Oakland Specific Plan EIR

Figure V.A-1
Existing Land Uses

Laney College is one of the four colleges of the Peralta Community College District, located near the Lake Merritt BART Station. The Lake Merritt Channel separates the Laney College Main Campus, located on Fallon Street, from the athletic campus. The Main Campus includes a large parking lot along 7th Street adjacent to I-880, as well as academic and administrative buildings that are clustered together in a complex in the northern corner of the campus. On one corner is the nine-story, triangular “Laney Tower,” the main administration building and tallest on campus.

Retail/Entertainment

Uptown, located north of the Central Core, has a vibrant arts, dining, and entertainment destination. Smaller-scale theaters and art galleries are located within the district. 25th Street is home to a large concentration of art galleries and studios in historic early 20th century production buildings and serves as the natural center for a proposed Art and Garage District. The Central Core also includes a distinctive retail cluster of shops.

KONO, located just north of Uptown, has small storefronts along Telegraph Avenue that host a variety of businesses as well as other spaces such as maker spaces, art galleries, bar, and restaurants, as well as a big retail supermarket (Koreana Plaza), which has created a place for entertainment. East of Telegraph Avenue, there are smaller-scale production buildings which establish a historic 25th Street Garage District. Originally an industrial and auto repair area, many of the buildings in the 25th Street Garage District area today have been converted into art galleries and makers space. The historic 25th Street Garage District spans both the BVDSP and the Downtown Oakland Specific Plan boundary.

The Black Arts Movement and Business District (BAMBD) near 14th Street also hosts a variety of businesses, as do 15th and 17th Streets. Old Oakland also has tree-lined streets that create a pleasant pedestrian space for shoppers.

The Jack London District, as shown on the Planning Sub-Area Map (Figure III-3) in *Chapter III, Project Description*, is situated on the estuary waterfront and has experienced recent changes in land use from historic industrial and distribution uses to housing, retail, dining, entertainment, office and maker uses. The area also contains important cultural and historic resources including several festival events in Jack London Square, the historic Waterfront Warehouse District, the historic Produce Market, rated as an “Area of Primary Importance” (API) and discussed further in *Section V.E, Cultural and Historic Resources*, as well as several landmarks and some of Oakland’s earliest buildings.

Chinatown is one of the most vibrant neighborhood retail districts and contains several historic areas as well as a distinct Asian-influenced character that attracts locals and visitors.

Convention and Visitor-Serving Use

The Central Core area is home to many of Oakland's residential hotels, or SROs. The Central Core area and parts of Old Oakland also include the Oakland Convention Center (which includes the Marriot Hotel), that spans the former Washington Street right-of-way between 10th and 11th Streets. The Central Core also contains many higher end hotels that offer places for conventions.

Industrial

The proposed Art and Garage District, located in the northern portion of the Plan Area, is an historic industrial and auto repair area. Typical conditions include commercial uses, long blocks, and one- to two-story building heights. Many of the historic buildings have been converted to art galleries. Within the Jack London District, south of the I-880 Freeway, are a variety of industrial, commercial, and residential uses that serve the area, as well as some of Oakland's earliest buildings. Along 3rd Street, west of Broadway, is a light industrial area with one- to two-story historic industrial and warehouse buildings. Oak Street, south of 10th Street, connects the east end of the Jack London District with the Lake Merritt BART Station. The area has a mix of auto-oriented low-rise industrial, residential, and office uses, with a few vacant lots. The Victory Court area, southeast of the I-880 in the Jack London District, includes light industrial uses, warehousing, parking, and the fire department training facility near the Lake Merritt Channel.

Open Space

The City of Oakland includes 3,865 acres of parkland. The existing total park acreage citywide is 9.1 acres per 1,000 residents. In total, there are 166 parks in the City of Oakland with a median park size of 2.1 acres.¹ The existing park acreage in the Plan Area is 45.28 acres, which equals 1.8 acres per 1,000 residents.

Parks within the Plan Area include 25th Street Mini Park, Bishop Floyd L. Begin Plaza, Channel Park, Chinese Garden Park, Estuary Park, Jefferson Square, Lafayette Square Park, Snow Park, and the Lake Merritt Channel Park (linear park). The Plan Area also encompasses one community-based arts and cultural center, the Malonga Casquelourd Center for the Arts; two open space plazas, Frank H. Ogawa Plaza and Henry J. Kaiser Memorial Park; and the Jack London Aquatic Center.²

¹ Trust for Public Land, 2018, City Characteristics (Oakland, CA), Available at: https://www.tpl.org/sites/default/files/city3/city3/tpl.OAK.8_16_18.pdf, accessed May 14, 2019.

² Oakland Parks, Recreation & Youth Development, 2019. Map of City of Oakland Parks and Recreation Facilities and Recreation Centers. Available at: <https://www.google.com/maps/d/u/o/viewer?mid=1UeZm1UbaXCcCJ6Lpjk51PDLDYvcX6k&ll=37.78772346793971%2C-122.25030494284795&z=13>, accessed February 12, 2019.

Lake Merritt is surrounded by a variety of parks such as Snow Park.. Amenities include children's play areas, a putting green, tennis courts, and various recreational centers. While Lake Merritt is not within the Plan Area boundary, it touches the border and is a very important resource for both residents of Oakland and the surrounding region.

Immediately adjacent to the Plan Area, Chinatown also has several parks such as Madison Square Park and Lincoln Square Park. The Lincoln Square Recreation Center is located nearby on Harrison Street between 10th and 11th Streets.

For further discussion on recreational opportunities, refer to *Section V.M, Public Services, Facilities, and Recreation*.

Residential Use

Located west of San Pablo is a mix of single-family homes with a network of wide, auto-centric boulevards (17th and 18th Streets) and new, mid-size residential developments. Lakeside is predominately residential, comprised mostly of closely spaced apartments, with a section of its core containing a mix of small- to medium-sized residential types. Newly developed multi-family housing in residential and mixed-use buildings is in the center of the KONO and Uptown neighborhoods. Old Oakland also includes residential buildings. The Jack London District includes a mix of commercial, residential, and industrial uses near lower Broadway (south of I-880 and Oak Street, south of 10th). In the Jack London District, there is new residential development occurring on the edges of the district near and away from the Produce Market as well as new residential construction in the core of the district.

(2) Approved and Under Construction Land Uses

A significant amount of new office and residential development is approved, under construction or has been recently completed (recorded in April 2019) in Downtown Oakland. These projects are a mix of residential, office, retail, and mixed use. This new development would significantly increase the number of residential and ground-floor retail uses in the Plan Area. For a discussion on population, housing impacts, and job growth see *Section V.L, Population and Housing*. For a discussion of impacts to public services and recreation see *Section V.M, Public Services, Facilities, and Recreation*.

Projects currently under construction, recently completed or approved within the Plan Area are listed below in Table V.A-1 and shown in Figure V.A-2.

a. Surrounding Land Uses and Approved and Under Construction Land Uses

Land uses surrounding the Plan Area, including existing and under construction and approved projects, are described below and shown in Figures V.A-1 and V.A-2, respectively. These projects include those completed just outside the Plan Area, including in areas to the north, areas to the

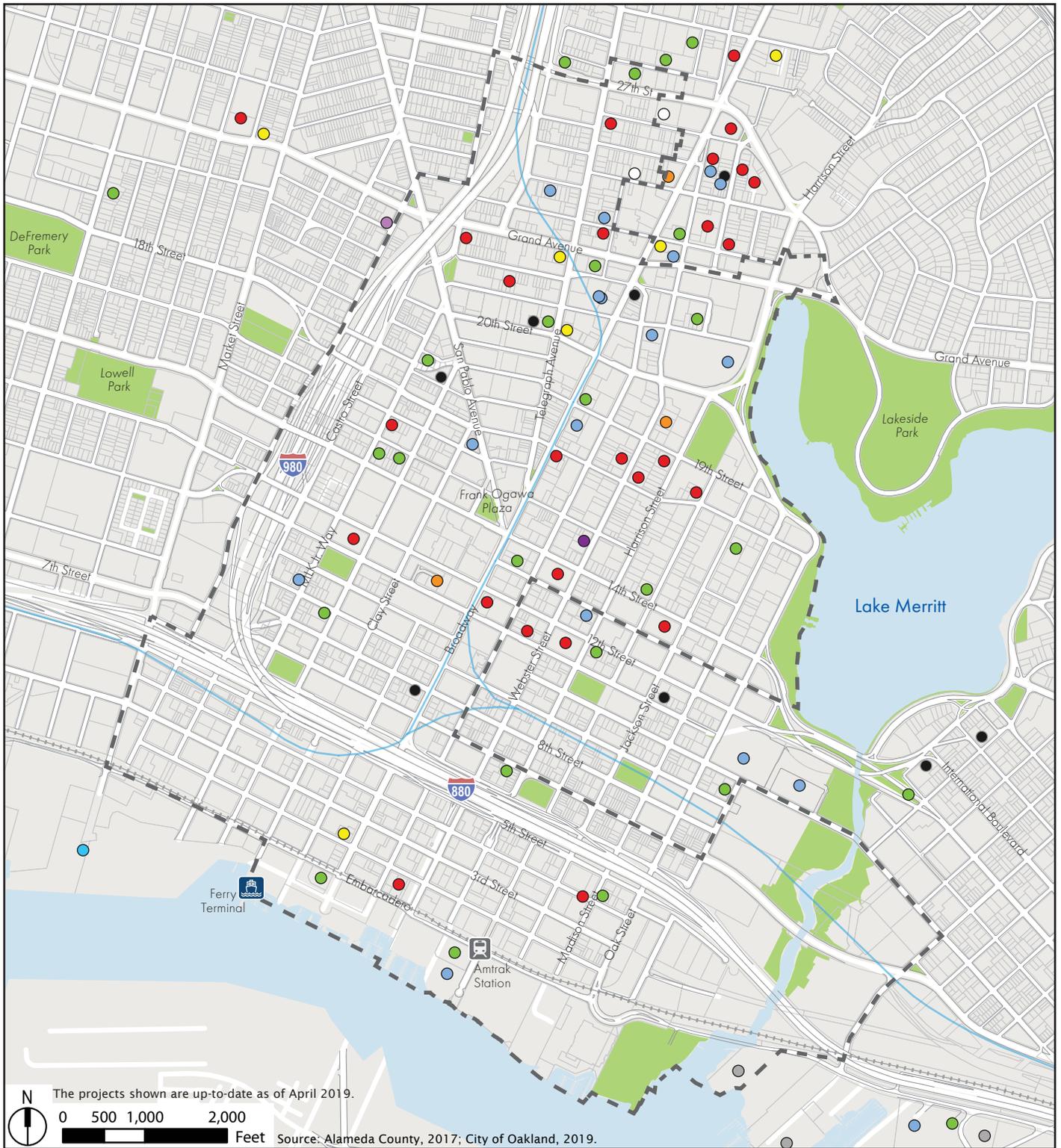
TABLE V.A-1 PROJECTS UNDER CONSTRUCTION OR APPROVED IN THE PLAN AREA

Project Name	Project Address or APN	Use	Building Stories	Residential Units	Office (SF)	Retail (SF)
2044 Franklin	2044 Franklin	Mixed Use	29	184	57,000	7,750
1414 MLK Jr. Way	1414 MLK Jr. Way	Residential Only	6	45	0	0
1550 Jackson	1550 Jackson St	Residential Only	5	20	0	0
1940 Webster	1940 Webster St	Mixed Use	7	173	0	2,000
2015 Telegraph	2015 Telegraph Ave	Mixed Use	14	114	0	2,000
2016 Telegraph	2016 Telegraph Ave	Mixed Use	18	230	0	4,500
420 13th St	420 13th St	Office		0	54,626	0
605 9th St	605 9th St	Residential Only	8	25	0	0
Balco	325 7th St	Mixed Use	27	380	0	9,110
Marriott Hotel	1640 Jefferson St	Hotel	22	0	0	1,960
1601 San Pablo Ave	1601 San Pablo Ave	Mixed Use	7	76	0	4,467
1433 Webster	1433 Webster St	Mixed Use	29	176	55,000	2,000
1755 Broadway	1750 Broadway	Mixed Use	38	307	0	5,000
412 Madison	412 Madison St	Mixed Use	7	157	0	3,000
Eastline Project - FDP - Scenario #1	2100 Telegraph Ave	Mixed Use	39	395	880,550	85,000
Eastline Project - FDP - Scenario #2	2100 Telegraph Ave	Office	28	0	1,600,000	72,000
Moxy Hotel	2225 Telegraph Ave	Hotel	7	0	0	0
1721 Webster	1721 Webster St	Mixed Use	25	250	0	2,000
2201 Valley	2201 Valley St	Office	27	0	750,000	0
522 20th St	522 20th St	Residential Only	5	24	0	1,500
Kapor Center	2134-2148 Broadway	Office	4	0	40,000	0
The Nook	2425 Valdez	Mixed Use	5	71	0	0
1518 MLK Jr. Way	1518 MLK Jr. Way/ 625 16th St	Residential Only	7	140	0	0
1700 Webster	1700 Webster St/ 330 17th St	Mixed Use	23	206	0	3,000
19th & Harrison	301 19th St/ 1889 Harrison St	Mixed Use	7	224	0	3,500
459 23rd St	459 23rd St	Mixed Use	6	65	0	3,700
459 8th St	459 8th St	Mixed Use	6	50	0	4,000

TABLE V.A-1 PROJECTS UNDER CONSTRUCTION OR APPROVED IN THE PLAN AREA

Project Name	Project Address or APN	Use	Building Stories	Residential Units	Office (SF)	Retail (SF)
Embark	2126 MLK Jr. Way	Affordable	6	60	0	0
Key System Building	1100 Broadway	Office/Retail	18	0	380,000	10,000
The Moran	585 22nd St	Residential Only	5	78	0	0
451 28th	451 28th St	Residential Only	6	40	0	0
2538 Telegraph	2538 Telegraph	Residential Only	5	37	0	0
Jack London Sq Site F2	40 Jack London Sq	Residential Only	8	338	0	0
Jack London Sq Site D	466 Water Street	Residential Only	8	135	0	0
1888 MLK	0 19th St	Mixed Use	6	79	0	0
T12	601 12th St	Office/Retail	24	0	600,000	10,000
Jack London Sq Site F3	55 Harrison St	N/A	N/A	N/A	100,000	N/A
44 Seven @ 17th	1640 Broadway	Mixed Use	33	255	11,000	5,000
Hanzel Apts	2323 Valley St/ 456 23rd St	Residential Only	4	34	0	0
2 Kaiser Plaza	325 22nd St	Office/Retail	33	0	800,000	11,000
T5/6	1100 Clay St	Residential Only	14	262	0	0
1900 Broadway	1900 Broadway	Mixed Use	36	452	78,802	23,417
Jenkins Tow	537 24th St	Mixed Use	7	42	36,153	0
913 MLK Jr Way	913 MLK Jr Way	Residential Only	6	27	0	0
Kaiser Center	300 Lakeside	Mixed-Use	15-40	580		1,360,500
Pigozzi	460 24th St	Office/Retail	6	0	86,100	12,000
250 17th St	250 17th St/ 1817 Alice	Mixed Use	6	74	0	3,300
250 14th St	250 14th St	Mixed Use	7	134	0	5,475
377 2nd St	377 2nd St	Residential Only	7	134	0	0
The Jefferson	1801 Jefferson St	Mixed Use	6	80	0	2,140

Notes: SF = square feet. N/A = not available
Source: City of Oakland Major Projects List, 2019.



Downtown Oakland Specific Plan EIR

**Figure V.A-2
Planned Projects**

east, areas to the south, and areas to the west that have been completed in the last 5 years. Most of these infill projects would result in some land use changes on individual parcels, increase intensity for development downtown, and affect downtown's urban form and character. The projects are described below.

(1) Land Uses to the North

Immediately north of the Plan Area are 27th Street; Grand Avenue; the Telegraph and Broadway corridors between 27th Street and West Grand Avenue; and I-580. The land uses in both areas are transitioning to include more residential and retail.

The Broadway corridor is within the Broadway Valdez District; until recently, the primary land uses were automobile show rooms, auto repair, medical, and some residential and commercial. The intensity of development was low with primarily one to two stories. This area is quickly transitioning into a more urban mixed-use district as the BVDSP is being implemented. A significant number of new development projects have been recently completed including a range of mixed-use developments with retail; restaurants; higher density residential ranging from three stories to four or five stories over ground floor uses (see photo 1); community gathering spaces (the Hive outdoor area); a grocer (Sprouts); and a drugstore (CVS).

The Telegraph corridor north of 27th Street is known as the Pill Hill District. Land uses along Telegraph Avenue are primarily commercial retail with some medical and instructional uses. Some properties have recently been redeveloped to mixed use, with three to four stories of residential over ground-floor retail. East of Telegraph Avenue, the land uses are primarily medical and institutional including Samuel Merritt University, Alta Bates Summit Medical Center (see photo 2), and Kaiser Permanente Oakland Medical Center. Buildings east of Telegraph Avenue are primarily two stories, with a multi-lane freeway located approximately 0.50 miles north of the Plan Area between the two medical centers. The southern boundaries of the BVDSP about the Plan Area's northern boundaries at Grand Avenue. Land uses west of Telegraph Avenue to I-980 are primarily multi-family residential developed around the turn of the 21st century.

Projects currently under construction or approved in land uses north of the Plan Area are shown below in Table V.A-2. Additionally, Telegraph Avenue is being transitioned to a "complete street" with bike lanes immediately adjacent to the sidewalks.



Photo 1- Mixed use building at 2900 Telegraph



Photo 2- Alta Bates Summit Medical Center

TABLE V.A-2 PROJECTS UNDER CONSTRUCTION OR APPROVED TO THE NORTH OF THE PLAN AREA

Project Name	Project Address or APN	Use	Building Stories	Residential Units	Office (SF)	Retail (SF)
2305 Webster	2305 Webster St	Mixed Use	24	130	0	3,000
West Elm Hotel	2401 Broadway	Hotel	7	72	0	16,000
2500 Webster St	2500 Webster St	Mixed Use	6	30	0	4,283
29th St Apts	295 28th St	Residential Only	7	91	0	0
2424 Webster St	2424 Webster St	Office	6	0	48,722	7,487
2270 Broadway	2270 Broadway	Mixed Use	24	223	0	5,000
24th & Harrison	277 27th St	Mixed Use	18	437	0	65,000
3300 Broadway	3300 Broadway	Mixed Use	5	45	0	2,824
Shops on Broadway	3001 Broadway	Retail	1	0	0	36,000
3000 Broadway	3000 Broadway	Mixed Use	7	127	0	8,000
Alta Waverly	2302 Valdez St	Mixed Use	7	196	0	31,500
Broadstone on Broadway	2800 Broadway, 2820 Broadway, and 2855 Broadway	Mixed Use	7	218	0	18,000
Hanover Uptown	325 27th St/ 2640 Broadway	Mixed Use	7	255	0	37,000
Hanover Waverly	2400 Valdez St/ 2450 Valdez St	Mixed Use	7	225	0	23,000
The Broadway	3073 - 3093 Broadway	Mixed Use	7	423	0	21,000
The Webster	2315 Valdez St/ 2330 Webster St	Mixed Use	7	234	0	16,000
2935 Telegraph	2935 Telegraph Ave	Residential Only	5	162	0	0
The Haven	3007 Telegraph Ave/528 30th St	Residential Only	4	41	0	0
424 28th	424 28th St	Residential Only	7	32	0	0
Nova Apartments	445 30th St	Residential Only	6	57	0	0
550 27th St	550 27th St	Residential Only	5	40	0	0
88 Grand	60-80 Grand Ave	Residential Only	35	263	0	0
Subaru Service	401 27th St	Office	TBD	0	60,000	0
401 29th St	401 29th St	Residential Only	4	83	0	0
Nook II	2415 Valdez St	Residential Only	6	79	0	0

Notes: SF = square feet; N/A = not available
Source: City of Oakland Major Projects List, 2019.

(2) Land Uses to the East

Lake Merritt (see photo 3) creates a natural border for the northeast side of the Plan Area. Land uses here mirror most of the Plan Area and include mixed-use, residential, retail, and commercial developments as well as civic, cultural, and institutional (see photo 4, Laney College). At the southernmost part of the Plan Area, 5th Avenue and the Lake Merritt Channel form the remaining portions of the Plan Area’s eastern boundary. The Plan Area abuts the LMSAP along its eastern boundaries, generally from Franklin Street and Broadway to the west, I-880 to the south, and 14th Street to the north.



Photo 3- Lake Merritt's eastern shoreline



Photo 4- Laney College

Projects currently under construction or approved to the east of the Plan Area are shown below in Table V.A-3:

TABLE V.A-3 PROJECTS UNDER CONSTRUCTION OR APPROVED TO THE EAST OF THE PLAN AREA

Project Name	Project Address or APN	Use	Building Stories	Residential Units	Office (SF)	Retail (SF)
250 14th St	250 14th St	Mixed Use	7	79	0	3,500
E. 12th St Remainder	101 East 12th St	Affordable	26	342	0	1,476
Fallon	925 Fallon St	Mixed Use	8	58	0	0
Monarch Tower	1261 Harrison St	Mixed Use	36	185	121,000	12,000
W-12 Phase 2	285 12th St	Mixed Use	7	77	0	1,500
Prosperity Place	188 11th St/ 1110 Jackson St	Affordable	5	71	0	2,000
1240 1st Avenue	1240 1st Avenue	Residential Only	7	24	0	0
1314 Franklin St	1314 Franklin St/ 385 14th St	Mixed Use	40	634	0	16,500
226 13th St	226 13th St	Mixed Use	7	261	0	15,000
Downtown Hampton Inn	378 11th St	Hotel	7	0	0	0
EBALDC Affordable Hsng	285 12th St	Affordable	7	65	0	0
W-12 Phase 1	301 12th St	Mixed Use	7	333	0	24,600
Oakland Civic Auditorium	10 10th St	Office	N/A		76,900	

Notes: SF = square feet; N/A = not available
Source: City of Oakland Major Projects List, 2019.

(3) Land Uses to the South

The Oakland Estuary and San Francisco Bay provide a natural border for the Plan Area’s southern border. The city of Alameda is located south of the Plan Area (see photo 6), separated from the city of Oakland by the Oakland Estuary and connected to the Plan Area waterfront by a few bridges as well as the Webster and Posey Tunnels. The Oakland Jack London Square Terminal serves as a transit stop for the San Francisco Bay Ferry and connects Oakland to eight other ferry terminals in cities such as Vallejo and South San Francisco via waterways.



Photo 5- Brooklyn Basin proposed development



Photo 6- Marina Village in the City of Alameda

Projects currently under construction or approved to the south of the Plan Area, including Brooklyn Basin (photo 5), are shown below in Table V.A-4:

TABLE V.A-4 PROJECTS UNDER CONSTRUCTION OR APPROVED TO THE SOUTH OF THE PLAN AREA

Project Name	Project Address or APN	Use	Building Stories	Residential Units	Office (SF)	Retail (SF)
Brooklyn Basin PUD	Embarcadero (btwn 5th & 9th Ave)	N/A	N/A	465	0	0
Channel Park	018043000112	N/A	N/A	0	0	0
Gateway & South Parks	018046000404	N/A	N/A	0	0	0
Shoreline Park	018046500204	N/A	N/A	0	0	0
Mirador	201 Broadway	N/A	7	48	0	0
4th & Madison	150 & 155 4th St	Mixed Use	7	330	0	5,000
Site C	018041000105	N/A	2	0	15,000	15,000
Site F1	01804200402	N/A	N/A	0	250,000	0
Waterfront Ballpark District	1 Market St	Mixed Use	N/A	4,000	2,000,000	

Notes: SF = square feet; N/A = not available
 Source: City of Oakland Major Projects List, 2019.

(4) Land Uses to the West

I-980, the John B. Williams Freeway, is a multi-lane freeway used for regional commuting and freight and separates the downtown Central Core from West Oakland and surrounding neighborhoods (see photo 8). The WOSP boundaries and I-980 about the western boundaries of the Plan Area. Mirroring land uses to the north of the Plan Area, West Oakland contains community commercial and urban residential land uses in addition to a variety of residential housing types. Due to its proximity to the Port of Oakland, West Oakland is characterized by manufacturing (see photo 7), industrial, and low- to medium- density land uses, with planned transit-oriented development and increased density around the West Oakland BART Station.



Photo 7- Legacy manufacturing building in West Oakland



Photo 8- Looking towards the Plan Area across I-980

Projects currently under construction or approved to the west of the Plan Area are shown below in Table V.A-5:

TABLE V.A-5 PROJECTS UNDER CONSTRUCTION OR APPROVED TO THE WEST OF THE PLAN AREA

Project Name	Project Address or APN	Use	Building Stories	Residential Units	Office (SF)	Retail (SF)
2850 Hannah	2850 Hannah St	N/A	5	90	0	2,500
2851 Hannah	2851 Hannah St	N/A	11	565	0	80,270
2852 Hannah	2852 Hannah St	N/A	17	830	0	163,686
2853 Hannah	2853 Hannah St	N/A	23	1,095	0	247,102
The Hub	1 Kirkham St	N/A	24 & 7	681	0	121,978
	2 Kirkham St	N/A	25 & 7	846	0	205,394
	3 Kirkham St	N/A	26 & 7	1,011	0	288,810

TABLE V.A-5 PROJECTS UNDER CONSTRUCTION OR APPROVED TO THE WEST OF THE PLAN AREA

Project Name	Project Address or APN	Use	Building Stories	Residential Units	Office (SF)	Retail (SF)
West Oakland Station	1452 7th St	N/A	10	698	2 Million	142,832
	1453 7St	N/A	10	862	3 Million	226,248
	1454 7th St	N/A	10	1,027	4 Million	309,664
WOD	500 Kirkham St	N/A	8	424	0	22,000
	501 Kirkham St	N/A	14	631	0	101,124
	502 Kirkham St	N/A	20	896	0	184,540
	503 Kirkham St	N/A	26	1,161	0	267,956

Notes: SF = square feet, N/A = not available
 Source: Fehr & Peers, 2019.

2. Regulatory Setting

The Downtown Oakland Specific Plan’s compatibility with the Oakland General Plan and other relevant planning policies is discussed in *Chapter IV, Policy*. The Plan’s relationship with relevant policies of the General Plan and other land use planning policies is described in detail in *Chapter IV, Policy*.

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section analyzes the impact related to land use that could result from implementation of the Specific Plan. The section begins with the criteria of significance, which establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the Specific Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would result in a significant land use impact 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 result in a physical change in the environment.

4. Fundamentally conflict any applicable approved local, regional, or state habitat conservation plan.

The fourth criterion is not applicable to the project, as there are no habitat conservation plans or natural community conservation plans in place in the project vicinity.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Analysis and Findings

(1) Physically Divide an Existing Community (Criterion 1)

The existing street grid system establishes the framework for the Plan Area and provides for visual and physical connections between the Plan Area and surrounding neighborhoods. Plan improvements would help create additional internal connections within the Plan Area and would not cause a physical division with an established community. Implementation of the Plan would result in a more active and pedestrian friendly environment that would enhance connections within the Plan Area, as well as to, and between, the surrounding neighborhoods.

Street Network Changes

Adoption and development under the Plan would include intersection improvements, corridor improvements, connectivity improvements, freeway crossing improvements, sidewalk closure gap and priority two-way street conversions, consistent with **Policy M-1.1**, listed below. The proposed street network changes would not involve any changes in land use and would not alter either the permitted uses or the allowable building heights. The proposed street network changes, including improvements to crosswalks (as discussed in *Chapter III, Project Description*) could decrease existing physical barriers by reducing the length of many of the Plan Area block faces and facilitating pedestrian movement through the neighborhood. Furthermore, the substitution of traffic lanes with transit-only lanes, widening of sidewalks, installation of mid-block crosswalks, and reopening of closed crosswalks (discussed in *Section V.B, Transportation*) would remove barriers to circulation, especially for non-automobile modes, which would be beneficial to neighborhood connectivity.

Public Realm Improvements

New and improved parks and open spaces would also form neighborhood common spaces and would help to foster a sense of place. New open spaces would not create physical barriers that could physically divide a community.

Proposed open space improvements would tend to link, rather than divide, neighborhoods and communities, as discussed in Policy CH-1-1.

Policy M-1.1. Design and construct connectivity and access improvements throughout downtown (as identified in Figure M-2 and M-3 and described in Appendix Table M-1 through M-3

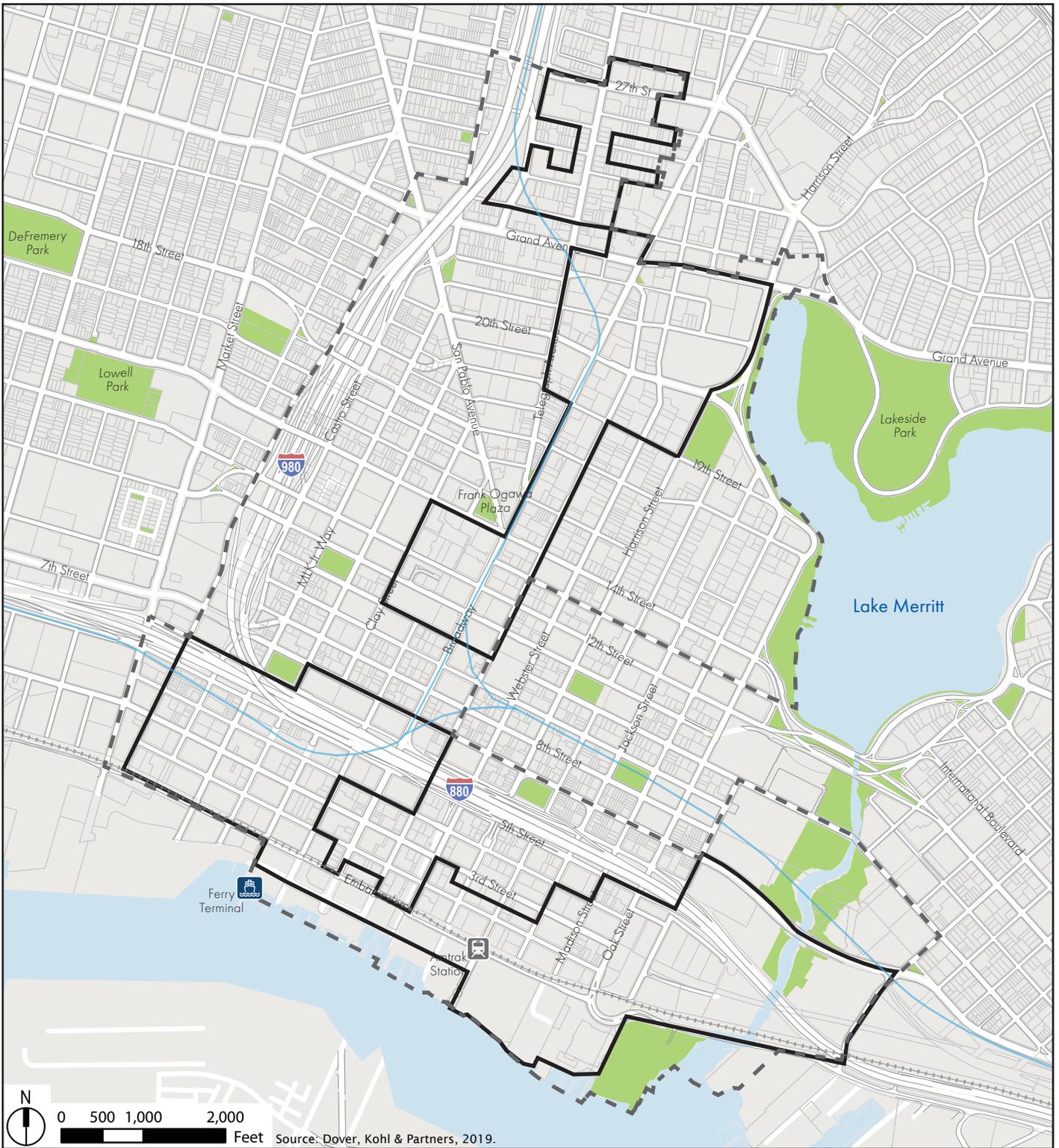
Policy CH-1-1. Working with the community, prioritize and implement public realm improvements to create a more connected and accessible network of inclusive, high-quality public open spaces downtown. Figure CH-1 identifies potential public space improvements recommended in the Downtown Oakland Specific Plan. Following Plan adoption, this map can be updated at regular intervals with community input to guide implementation.

Because the Plan's proposed street network changes and open space improvements would not physically divide an established community, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to physical division of the existing community.

(2) Conflict with Adjacent Land Uses (Criterion 2)

The Plan's proposed goals, policies, and proposed land use designations are intended to facilitate development in the downtown in a way that would meet community needs and preserves Oakland's unique character by focusing the most intense development and opportunity for transformative change around transit and activity nodes. Land use changes fit into a larger economic development strategy for downtown. The Plan would result in a higher density and intensity of mixed uses within the Plan Area. The areas where the most significant changes in land use are proposed include: areas south of I-880 within Jack London District including Oak Street and Victory Court and areas adjacent to Howard Terminal; the Central Core (near transit, and where mixed-use workplace opportunity sites are present); and areas of KONO that have much lower allowed height than the balance of downtown and that line major corridors (Telegraph Avenue, 27th Street).

Opportunities for increased intensity are shown on Figure V.A-3. Opportunity sites include infill sites, which are vacant land (including surface parking), underutilized sites, or sites with buildings that could better contribute to the public realm, are shown on Figure V.A-4. Areas proposed for

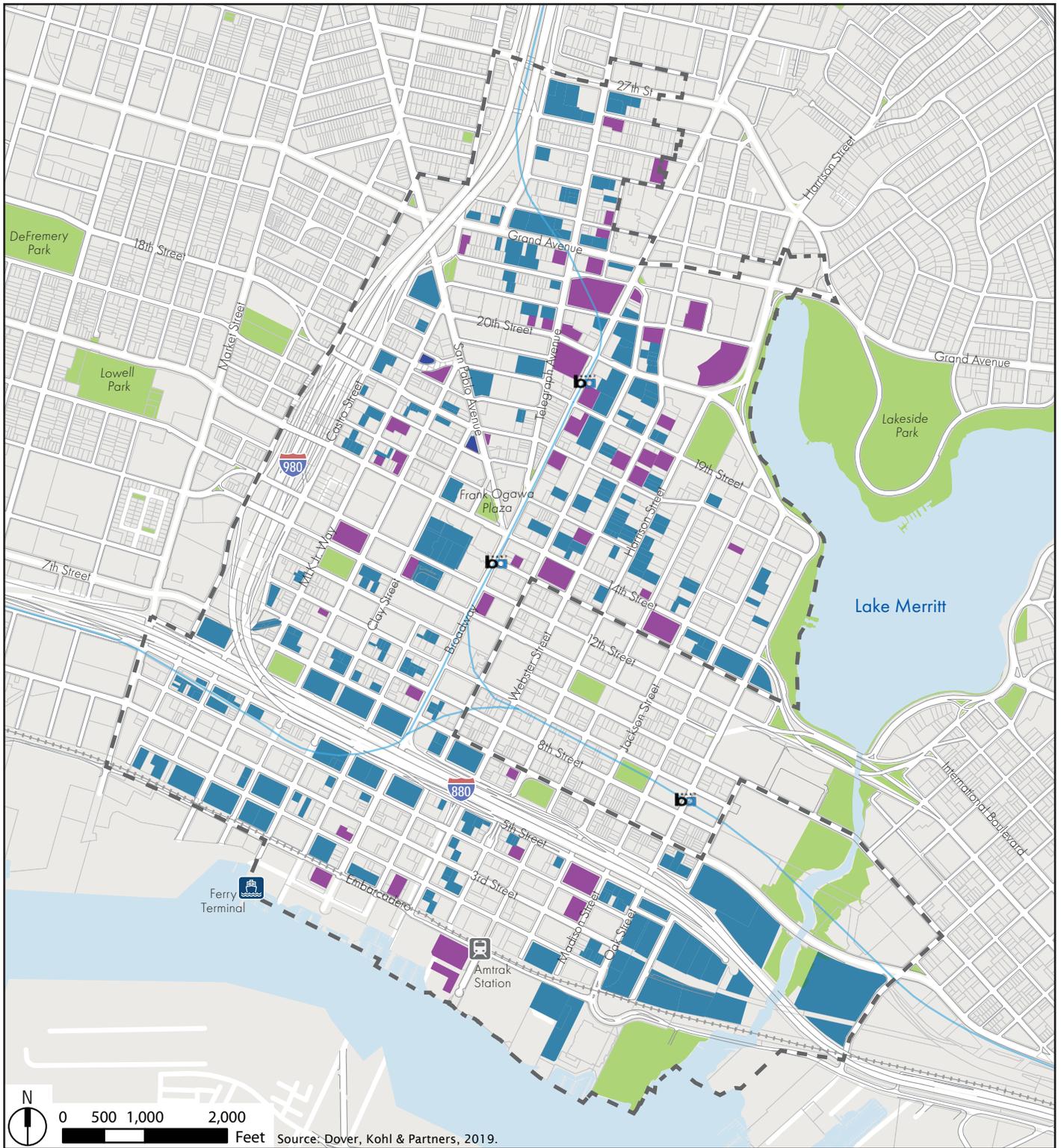


Legend

- Downtown Plan Boundary
- Parks
- BART Station
- Opportunity for Increased Bonus Intensity
- BART Line
- Railroad

Downtown Oakland Specific Plan EIR

Figure V.A-3
Opportunities for Increased Density



Legend

- Downtown Plan Boundary
- Parks
- ba BART Station
- Recently Completed/Anticipated Development
- BART Line
- Development Opportunity Sites
- Railroad

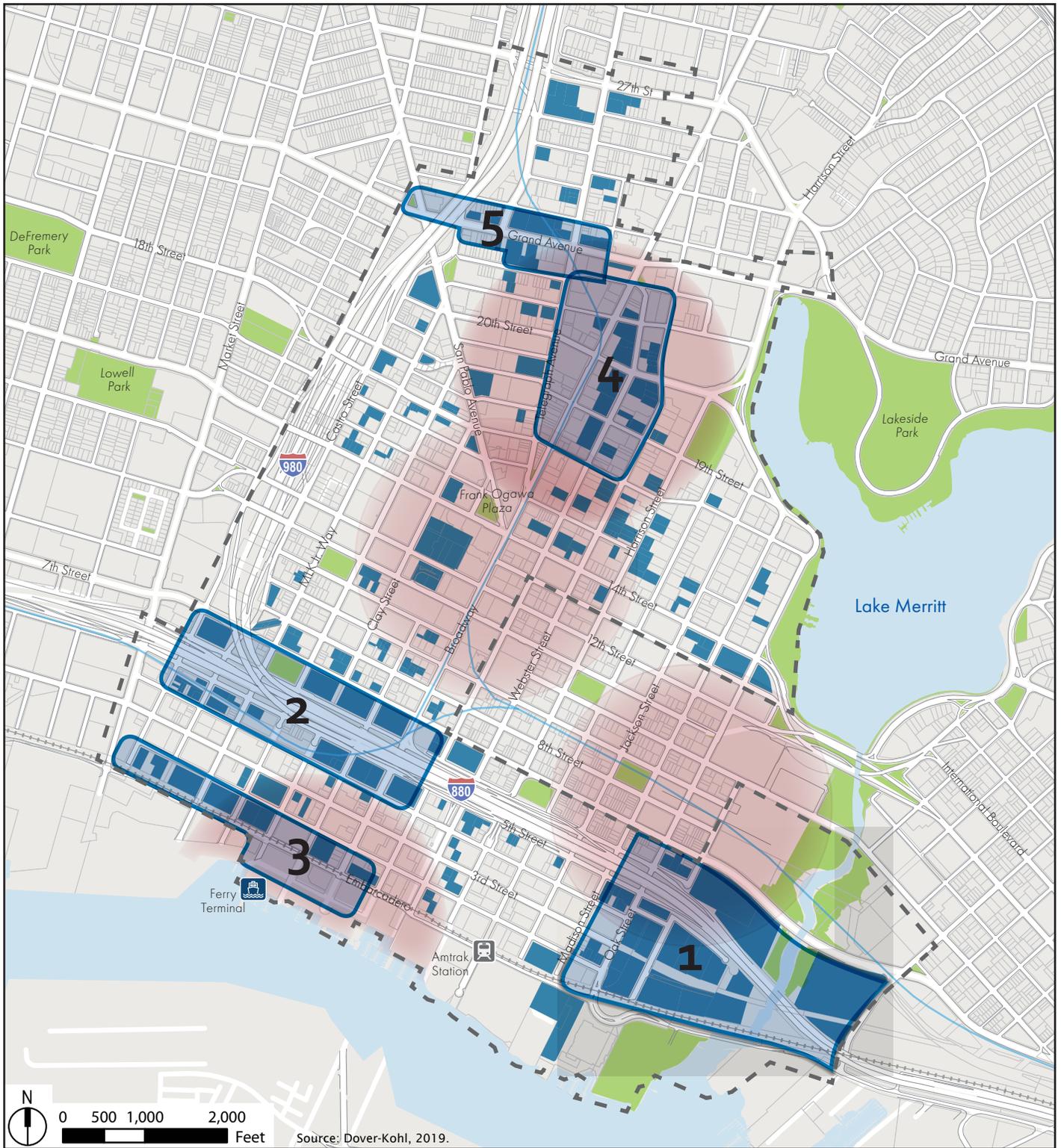
Downtown Oakland Specific Plan EIR

**Figure V.A-4
Opportunity Sites**

larger, more transformational change are shown on Figure V.A-5 and described in the next paragraph.

Jack London District

- Area 1, along the Oak Street corridor and Victory Court area (currently a mix of primarily institutional and industrial uses) is proposed to become a node of primarily mixed higher density residential and commercial development that would link future development, public space improvements, and transit access to form a dynamic activity hub on the east side of the Jack London District. The current land use designations include primarily EPP Mixed Use District, Central Business District, and EPP Parks. The Specific Plan proposes modifying the land use designation for seven areas within Area 1 (#22, 23, 24, 25, 26, 27 and 31, shown on Figure III-6 in *Chapter III, Project Description*, and shown in Table III-2). Number 22 will be changed from EPP Mixed Use District to LUTE Central Business District 2. Number 23 will be changed from LUTE Urban Park and Open Space to LUTE Central District 2. Number 24 and 25 will be changed from EPP Parks to LUTE Central Business District and EPP Mixed Use District, respectively. Number 26 will be changed from EPP Planned Waterfront Development 1 to EPP Mixed Use District. Number 27 will be changed from LUTE Community Commercial to EPP Mixed Use District. Number 31 will remain EPP Mixed Use District but the Floor Area Ratio (FAR) will increase from 5.0 to 12.0
- Area 2, located along I-880 in the Jack London District where there is currently a cluster of several publicly owned parcels and a couple of privately-owned parcels, could be redeveloped over time for mixed-use development that could include both market-rate and affordable housing. The current land use designations (as shown in Table III-2) include LUTE Community Commercial, LUTE Business Mix, EPP Light Industry 1, EPP Off-Price Retail District, EPP Retail Dining Entertainment 2, and EPP Produce Market. The Specific Plan proposes modifying the land use designations for eleven areas within Area 2 (#3, 6, 7, 8, 9, 10, 15, 16, 17, 32 and 33) shown on Figure III-6 in *Chapter III, Project Description*). The changes are as follows: Number #3 to LUTE Central Business District 2, Number #6 to EPP Mixed Use District, #7, #8, and #9 to LUTE Central Business District 2, #10 to EPP Produce Market, #15 to EPP Retail Dining Entertainment 2, and #16 and #17 to EPP Light Industry 1. Number #32 is remaining EPP Retail Dining Entertainment 2 but the FAR will increase from 7.0 to 12.0 and Number #33 will remain EPP Produce Market but the FAR will increase from 1.0 to 2.5.
- Area 3, identified as future land use and transportation infrastructure, would include a mix of institutional and flex industries as well as mixed-use development of medium intensity. Street improvements along Embarcadero and Water Street and a cluster of potential development sites between Embarcadero and 2nd Street could form a new mixed-use waterfront district that connects Howard Terminal to Jack London Square. The current land use designations include primarily EPP Off-Price Retail, and EPP Light Industry 1.



Legend

- Downtown Plan Boundary
- Parks
- Opportunity Sites
- # Transformational Opportunity Areas
- Activity Node
- BART Line
- Railroad

Downtown Oakland Specific Plan EIR

**Figure V.A-5
Transformational Opportunity Areas**

and EPP Retail Dining Entertainment 1. The Specific Plan proposes modifying the land use designations for three areas within Area 3 (#14, #18, and #19, shown on Figure III-6 in *Chapter III, Project Description*, and shown in Table III-2). The changes are as follows: Number #14 to EPP Retail Dining Entertainment 2, and #18 and #19 to EPP Mixed Use District.

The Plan proposes changing the land use designation from EPP Light Industry 1 to EPP Mixed Use District in one area (#19), as shown in Figure III-6 in *Chapter III, Project Description*. None of the proposed land use changes are intended to remove any specific individual business. The Specific Plan does not propose to transition any heavier industrial uses (such as recycling and heavy track-intensive uses) to any other uses.

Other changes to General Plan designations in Jack London District include #11 change from EPP Mixed Use District to EPP Produce Market, #12 from EPP Waterfront Commercial Recreational 1 to EPP Mixed Use District, #13 from EPP Retail Dining Entertainment 1 to EPP Mixed Use District #20 and #28 from EPP Waterfront Warehouse District to EPP Mixed Use District, #21 from no designation to LUTE Central Business District 2, and #34 is remaining EPP Waterfront Mixed Use but the FAR will increase from 2.0 to 8.0.

Both Policy E-2.7 and Policy E-2.5 call for industrial or flex industrial space. Approximately 260,000 square feet of flex industrial space is envisioned for Jack London Square where there are already industrial uses along 3rd Street, Oak Street, south of 10th Street, and in the Victory Court area southeast of the I-880.

Policy E-2.7: Ensure City policies and actions maintain sufficient industrial space downtown to accommodate user needs—especially maintaining downtown’s unique existing strengths in providing space for small-scale light industrial uses such as custom manufacturing, food production, arts and distribution. As described in the land use chapter, maintain industrial uses in specific areas near port and freight infrastructure.

Policy E-2.5: Review and revise zoning and other City requirements to allow custom manufacturing uses in ground-floor commercial spaces so that tenants can make and sell products in the same space.

Future institutional space is envisioned for Laney College where there is an already established educational campus, such that additional development would not conflict with nearby land uses.

Additional residential units are envisioned throughout the Plan Area; the most intense development would be within the Jack London District (14,647 units). As discussed in Policy H-1.7, the total housing production will be approximately 29,100 new units.

Policy H-1.7: Ensure that a mix of market-rate and income-restricted housing is constructed in downtown, Target creation of between 4,365 and 7,275 (aspiration target) affordable housing units including units designated to accommodate larger families out of a total housing production target of

29,100 new units. The target breakdown of new affordable units by income range, based on the City's 2015-2023 RHNA, should be: 15% extremely low-income, 15% very low-income, 30% low-income and 40% moderate income

More commercial hotel spaces are envisioned for downtown as described in Policy H-1.9.

Policy H-1.9: Encourage the development of more commercial hotels downtown to relieve pressure to convert permanent housing units and SRO hotels to short-term tourist rentals.

Although, as described above, adoption of and development under the Specific Plan would result in a change in land use patterns throughout the Plan Area, the transition would occur incrementally over time as discussed within Policy LU-1.2 of the Specific Plan.

Policy LU-1.2: Encourage incremental development to fill in gaps in the existing urban fabric, while also identifying opportunities for larger and more transformative developments.

While the transition of land use would occur incrementally and over time, land use compatibility is an important component of the well-being of communities, especially in urban areas where densities are higher, and a mixture of differing land uses can generate conflicts. Residential uses adjacent or in close proximity to heavy industrial uses can be difficult to harmonize. People living near industries may experience higher levels of noise, pollution, and truck traffic, and less visually attractive conditions. Industrial uses can experience greater regulatory controls over their activities and, despite a facility's location in an industrial zone, complaints may force the facility to change its operations.

In addition, the General Plan contains substantial policy requirements pertaining to compatibility of land uses that must be implemented throughout all the City's neighborhoods, including those within the Plan Area. As described within *Chapter IV, Policy*, adoption of the Specific Plan would be accompanied by 34 General Plan amendments (including the Howard Terminal Option General Plan amendments). However, the Specific Plan would not replace the General Plan's existing policy directions on compatible land uses and thus these policies would apply to future development under the Specific Plan. Conformance to the General Plan, including Land Use and Transportation Element (LUTE) policies listed below, would discourage development of incompatible land uses or land uses that would result in a division within an established community.

Policy N2.1: As institutional uses are among the most visible activities in the City and can be sources of community pride, high quality design and upkeep should be encouraged. The facilities should be designed and operated in a manner that is sensitive to surrounding residential and other uses.

Policy N5.2: Residential areas should be buffered and reinforced from conflicting uses through the establishment of performance-based regulations, the removal of non-conforming uses and other tools.

Policy N7.2: Infrastructure availability, environmental constraints and natural features, emergency response and evacuation times, street width and function, prevailing lot size, prominent development type and height, scenic values, distance from public transit and desired neighborhood character are among the factors that should be taken into consideration when developing and mapping zoning designations or determining compatibility. These factors should be balanced with the citywide need for housing.

The Specific Plan proposes the eventual development of housing units near freeways and other sources of diesel exhaust particulates and other toxic air contaminants (TAC)s due to their proximity to heavy industrial uses (such as Schnitzer Steel) which pose a significant risk to human health. Housing proposed by the Specific Plan near the freeways, high volume roadways, BART and the railroads would also be exposed to high noise levels. The compatibility of new residential development with these environmental conditions is more specifically addressed in *Section V.C Air Quality*, and *Section V.K Noise*, of this EIR.

Central Core/Uptown/Lake Merritt Office District

In Area 4, a cluster of opportunity sites around the 19th Street BART Station provide an opportunity to aggregate parcels for larger footprint towers. Together with several nearby approved projects and projects under construction, this area would be downtown's premier office hub, featuring the tallest and most dense development downtown, as discussed in Policy E-2.1, Policy LU-1.4 and Policy H-1.1 from the Specific Plan below. In addition, General Plan amendment #29 (as shown in Figure III-6) would create a new LUTE Central Business District 3 for areas with the greatest intensity, so that FAR would be increased from 20.0 to 30.0. In addition #30 will be changed to LUTE Urban Park and Open Space from LUTE Urban Residential.

Policy E-2.1: Prioritize future office development at sites identified in this Plan as well-located for office use (while still encouraging office development to occur elsewhere in downtown). Primary sites are located near BART and existing office concentrations at City Center and the Lake Merritt district.

Policy LU-1.4: Designate 'Office Priority Sites' in key areas of City Center and the Lake Merritt Office District, which require a certain percentage of gross floor area to be dedicated to commercial office space.

Policy H-1.1: As part of the updates to zoning and development incentive program, adjust the zoning in identified areas of opportunity to create new high-intensity, mixed-use neighborhoods.

While additional office sites will be identified throughout the Plan Area, these sites would be consistent with the overall land use pattern already occurring within City Center and Lake Merritt Office district.

In Area 5, several opportunity sites center around Grand Avenue comprising surface parking lots and low-scale commercial development, as well as the United States Postal Service (USPS) Carrier Annex. These sites provide an important opportunity to make a more inviting gateway to downtown by framing the street with higher intensity. This area would enhance the northern entry to downtown leading to the Lake Merritt Office District.

Policy LU-1.1: Revise zoning regulations within the Downtown Plan area to reflect community goals and feasible development potential. This new zoning framework should address the need for a clear development hierarchy, improved public space standards, expanded frontage requirements and principles, building-form criteria, rational lot requirements, and a streamlined development process to ensure flexibility and predictability for developers and the community.

Policy LU-1.5: Draft and adopt design guidelines to support the intended physical character and land uses of the Character Areas, to better connect parks and open spaces to one another as well as neighborhoods outside downtown, including connecting the downtown core with the waterfront. Public streets and rights-of-way can be used for playful and active recreation, community gathering, economic activity, art, cultural activities, and urban greening. Use the City's Small Project Design Guidelines and Design Guidelines for Corridors and Commercial Areas as a starting point.

KONO

The current land use designations (shown in Table III-2) include primarily LUTE Urban Residential (#1), and LUTE Community Commercial (#2). The Specific Plan proposes modifying the land use designations for # 1, #2, shown on Figure III-6 in *Chapter III, Project Description*, and shown in Table III-2. The changes are as follows: Number #1 and #2 to LUTE Central Business District 1, which is a new designation with a FAR of 12.0.

Old Oakland/West of San Pablo

The Specific Plan proposes modifying the land use designations for #4, and #5, shown on Figure III-6 in *Chapter III, Project Description*, and shown in Table III-2. The changes are as follows: Number #4 from LUTE Mixed Housing Type Residential to LUTE Central Business District 2, and Number #5 from LUTE Urban Residential to LUTE Central District 2.

Summary of Findings

Implementation of General Plan and Draft Specific Plan policies, including but not limited to those described above, means that no significant land use impacts related to land use incompatibility would occur as a result of the adoption and development under the Specific Plan.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to conflict with adjacent land uses.

(3) Conflict with Land Use Policy (Criterion 3)

The Plan is a regulatory program and, if adopted, would result in new planning policies and controls for land use to accommodate additional jobs and housing. Potential land use policy conflicts are described in detail in *Chapter IV, Policy*. Conflicts with a general plan do not inherently result in a significant effect on the environment within the context of CEQA. As stated in Section 15358(b) of the CEQA Guidelines, "Effects analyzed under CEQA must be related to a physical change." Section 15125(d) of the CEQA Guidelines states that EIRs shall discuss any inconsistencies between the project and applicable general plans in the Setting section of the document (not under Impacts). Further, Appendix G of the CEQA Guidelines (Environmental Checklist Form) explicitly focuses on environmental policies and plans, asking if the project would "conflict with any applicable land use plan, policy, or regulation ...adopted for the purpose of avoiding or mitigating an environmental effect". Even a response in the affirmative, however, does not necessarily indicate the project would have a significant effect, unless a physical change would occur. To the extent that physical impacts may result from such conflicts, such physical impacts are analyzed in this Draft EIR in the section that most aptly applies to that impact (e.g., Noise).

The Specific proposes amendments to the General Plan including the EPP in order to reconcile current differences between the Specific Plan and current policies. As a result, the Specific Plan would not conflict with adopted land use policy.

General Plan Noise Element

Although the Specific Plan's proposed "no [noise] complaint" zones would not help the City further achieve Policy 3, they would not directly conflict. The "no complaint" zones proposed in the Specific Plan Area near maker, artist, entertainment and cultural activities, like the Noise Element goals, are intended to improve and maintain Oakland's quality of life. Given the complexities and sometimes-conflicting interests related to city management, it is common for there to be tensions and sometimes competing objectives across city policies. Noise disclosures would be given to residents in these areas, but existing sensitive receptors in the proposed noise-generating zones would not be subject to the same interior noise levels as required by the City's SCAs for new development. The Specific Plan policy recommendations are intended to encourage more arts uses (including entertainment and cultural activities) in the Plan Area, pursuant to the Plan's Goal 4: Encourage diverse voices and forms of expression to flourish. This potential inconsistency is identified here for informational purposes. The physical effects of the Specific Plan implementation on the environment are analyzed in *Section V.K, Noise*.

Estuary Policy Plan

The Specific Plan would conflict with the EPP's current vision for an Off-Price Retail District west of Broadway in the Jack London District. By changing land use designations in the Jack London District, the Plan would eliminate the EPP Off-Price Retail District designation and replace it with Light Industrial and Mixed-Use designations. Existing uses would remain, but the Specific Plan vision for this area of the EPP includes a clear delineation of industrial uses along 3rd Street that fade into a mix of uses to the north and south, not a collection of home improvement and other off-price retail buildings. However, any conflicts with the EPP would be resolved through amendments to the EPP proposed as part of the Specific Plan.

Please see *Chapter IV, Policy*, for a discussion of the Plan's relationship with land use policy documents.

(4) Habitat Conservation Plan or Natural Community Conservation Plan (Criterion 4)

This criterion is not applicable to the Specific Plan, as there are no Habitat Conservation Plans or Natural Community Conservation Plans in the Plan Area vicinity, or other approved local, regional, or state habitat conservation plan. The closest Habitat Conservation Plan is the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), located more than 15 miles east of the Plan Area. A discussion of Lake Merritt and its wildlife refuge status is discussed in *Chapter V.G, Biological Resources*. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to a conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

c. Cumulative Land Use Impacts

As described throughout this section, the Plan would not result in a significant land use impact by potentially physically dividing an established community; or 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. Although the Specific Plan would change designated parcels from Light Industry to Mixed-Use, the Plan would maintain an industrially-zoned buffer area between Brush and Market Streets to support the City's Industrial Land Use Policy in the adjacent West Oakland area and would therefore not result in a cumulative considerable contribution to the city-wide loss of industrial land supply. Thus, the Plan would not be combined with or add to any potential adverse land use impacts that may be associated with other cumulative development. A review of cumulative development in the area, including past, present, existing, pending, and reasonably foreseeable future development, does not reveal any

significant adverse cumulative impacts in the area. Cumulative development in the area consists of residential, commercial, office, and other typical urban uses.

Cumulative development, in combination with the Specific Plan, has and would continue to result in the development and redevelopment of infill and underutilized sites throughout the area. Infill projects in urban areas allow for the capitalization of existing transit systems and infrastructure and minimize impacts to sensitive resources that would likely be degraded in a development on a greenfield site. Additionally, by locating residential and commercial development near transit and employment centers and by incorporating a mix of uses, urban mixed-use projects reduce vehicle miles traveled. The development program under the Plan would contribute to a higher density in the area, which is anticipated by the City of Oakland General Plan. The Plan is generally consistent with adopted plans and the overall vision for the area. Based on the information in this Land Use section and for the reasons summarized above, the Plan would not contribute to any significant adverse cumulative land use impacts when considered together with past, present, and reasonably foreseeable future development, and would therefore have a less-than-significant impact.

B. TRAFFIC AND TRANSPORTATION

This section describes the transportation and circulation conditions, including transit services and pedestrian and bicycle facilities in the Plan Area and its vicinity; discusses the State and local regulations and policies pertinent to transportation and circulation; assesses the potentially significant transportation and circulation impacts that could result from implementation of the Specific Plan; and provides, where appropriate, mitigation measures to address those impacts.

1. Setting

The existing transportation-related context in which the Specific Plan would be implemented is described below, beginning with a description of the Plan Area and the street network that serves Downtown Oakland. This section also describes existing transit, bicycle network, and pedestrian facilities; current conditions for roadways in downtown; planned transportation changes in downtown; and applicable planning policies.

a. Existing Road Network

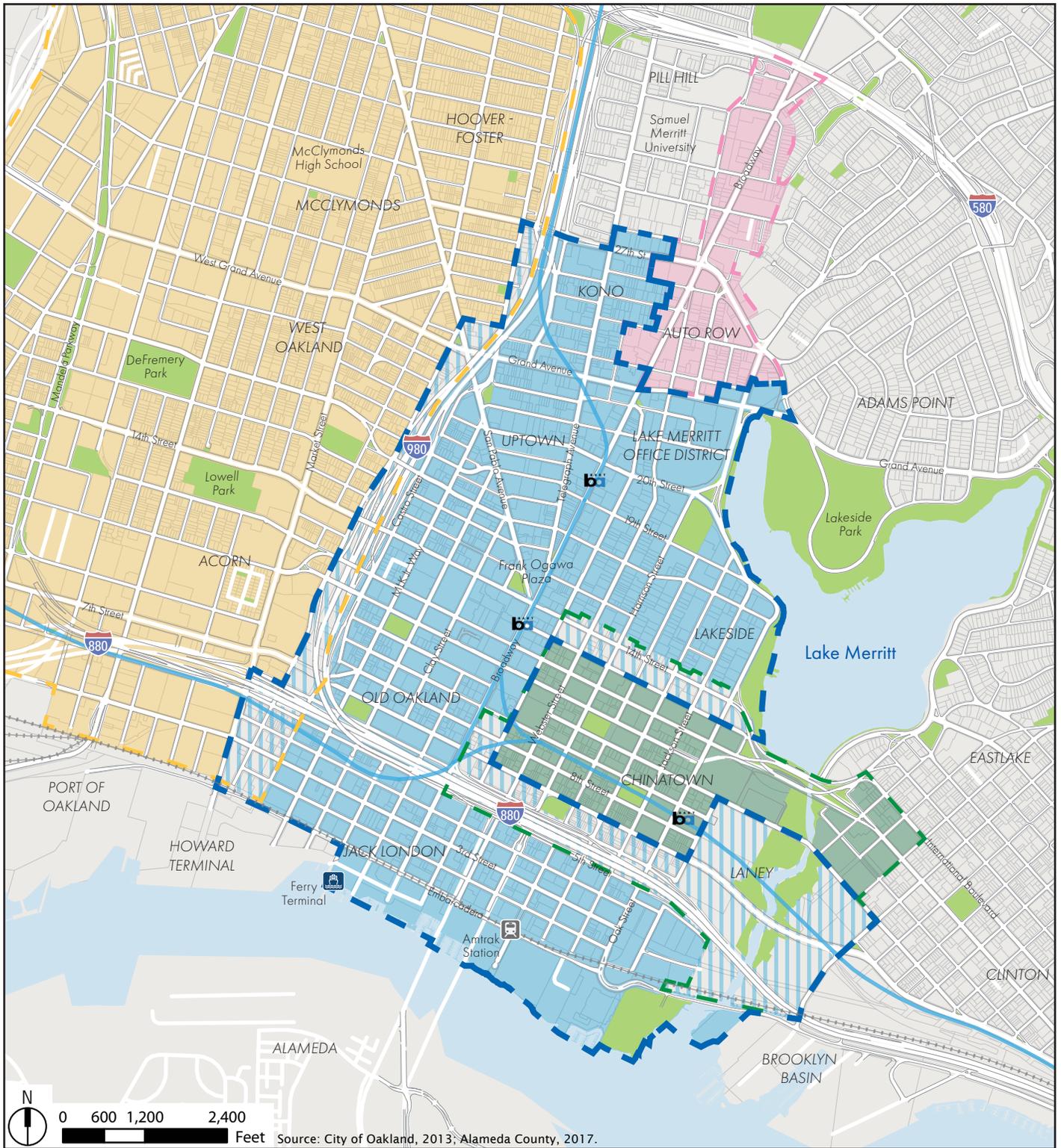
Regional and local roadways serving downtown at the time of the NOP are described below. Figure V.B-1 presents the Plan Area.

(1) Regional Access

A brief description of the regional roadway network serving downtown is provided below. Average daily traffic volumes were obtained from Caltrans.¹

- *Interstate (I-) 980* is an eight-lane north-south freeway along the west side of downtown that connects State Route (SR) 24 and I-580 to I-880. Ramps connect to downtown via 27th Street, 17th/18th streets, 11th/12th streets, and Jackson Street at I-880. I-980 has an annual daily traffic volume (AADT) of 130,000 vehicles.
- *State Route 24* is an eight-lane east-west freeway between I-580 in Oakland and Walnut Creek to the east. East of I-580, SR 24 continues as I-980. SR 24 has an AADT of approximately 142,000 vehicles east of I-980.
- *I-580* is an eight-lane east-west freeway between US 101, in Marin County, and I-5 south of Tracy. I-980 provides access between downtown and I-580. Ramps on I-580 also connect to downtown via Harrison Street and Oakland Avenue as well as Grand Avenue. I-580 has an AADT of approximately 241,000 vehicles per day near the SR 24 interchange with I-980.

¹ Caltrans, 2015. Traffic Volumes on the State Highway System.



Legend

-  BART Line
-  Downtown Oakland Specific Plan Area
-  Areas of overlap between Downtown Oakland Specific Plan and other Oakland specific plans
-  BART Station
-  Lake Merritt Station Area Plan
-  West Oakland Specific Plan Area
-  Railroad
-  Parks
-  Broadway-Valdez Specific Plan Area

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**Figure V.B-1
Project Study Area**

- *I-880* is an eight-lane north-south freeway between I-80 in Oakland and I-280 in San Jose. I-880 connects with I-980 which provides access to Downtown Oakland. Northbound I-880 off-ramps connect with downtown via Oak Street and Broadway while Jackson Street connects to the northbound I-880 on-ramp. Southbound I-880 drivers exiting the freeway for downtown must do so at Union Street, west of downtown, while there are two on-ramps at Broadway and Oak Street. I-880 has an AADT of approximately 207,000 vehicles per day near the I-980 interchange.
- *I-80* is an eight- to ten-lane national freeway extending west to San Francisco, and east through Berkeley and Sacramento, into Nevada and further east. Grand Avenue provides access between I-80 and downtown. I-980 via I-580 and I-880 also provide downtown access. I-80 has an AADT of approximately 270,000 vehicles per day just north of I-580 in Emeryville.
- *SR 260 (Webster-Posey Tubes)* is generally a four-lane road connecting I-880 via the Jackson Street on-ramp in Oakland with Atlantic Avenue in Alameda via the Webster-Posey Tubes. Webster and Harrison streets in downtown connect to SR 260 and SR 260 serves about 30,000 vehicles per day through the Webster-Posey Tubes.

Congestion in the Bay Area has increased significantly over the past 20 years with the addition of over one million residents and almost one million jobs. This congestion has affected the regional freeway system, as well as the local street networks that connect to those regional freeways.

In the most recent Regional Transportation Plan², the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) found that the Bay Area consistently ranks as one of the most congested metropolitan areas in the nation. They concluded, however, that additional roadway capacity would not solve the problem and that the region must instead find ways to operate the existing highway and transit networks more efficiently. To that end, Plan Bay Area recommends increasing non-auto travel mode share and reducing vehicle miles traveled (VMT) per capita and per employee by promoting transit-oriented development, transit improvements, and active transportation modes such as walking and bicycling. These strategies seek to not only improve mobility within the region, but also reduce regional and statewide greenhouse gas (GHG) emissions.

(2) Local Access

There are many local and arterial streets serving downtown. A brief description of key streets serving the area is provided below:

² Transportation 2035 Plan for the San Francisco Bay Area, Final April 2009, Change in Motion, Transportation 2035, https://mtc.ca.gov/sites/default/files/o-ToC_and_Preamble-Final.pdf, accessed August 18, 2019.

- *San Pablo Avenue* is a major north-south arterial stretching from downtown Oakland north to the City of San Pablo. It is designated as SR 123. In downtown, San Pablo Avenue operates with two lanes in each direction, with left-turn pockets provided at key intersections. Along with Telegraph Avenue, it is one of the primary local roadways connecting downtown with the City of Berkeley.
- *Brush Street* is a major north-south arterial extending from south of I-880 at 2nd Street north along the west side of I-980 where it merges with San Pablo Avenue north of West Grand Avenue. Brush Street is one-way southbound and consists of three lanes. Brush Street and Castro Street form a one-way couplet.
- *Castro Street* is a major north-south arterial extending from south of I-880 at 2nd Street north along the east side of I-980 where it merges with Martin Luther King Jr. Way at West Grand Avenue. Castro Street is one way northbound and consists of three lanes. Castro Street and Brush Street, which is along the west side of I-980, form a one-way couplet.
- *Martin Luther King Jr. Way* is a north-south arterial extending from downtown at Howard Terminal to the City of Berkeley. In downtown, Martin Luther King Jr. Way has two travel lanes in the north and south directions.
- *Telegraph Avenue* is a major north-south street, extending between Broadway in Downtown Oakland and Berkeley, with two travel lanes in each direction north of 29th Street and one lane in each direction south of 29th Street.
- *Broadway* is a major north-south street, extending between Jack London Square and SR 24 in Oakland. Broadway generally provides two travel lanes in each direction and provides a landscaped median between 2nd and 11th streets, at Latham Square, and between 20th and 22nd Street in the Plan Area.
- *Webster Street* is a major north-south street that provides access through downtown from Broadway to the City of Alameda via the Webster Tube. Webster Street is one-way southbound with two lanes through the Tube while it has four southbound lanes north of 7th Street to 14th Street where it reduces to three lanes and then down to two lanes north of 20th Street. North of Grand Avenue Webster Street becomes a two-way street with one lane each direction.
- *Harrison Street* is a major north-south street that provides access connecting I-580, north of downtown, to Alameda via the Posey Tube. It has two northbound lanes through the Posey Tube, widens out to three lanes at 7th Street, and then becomes at four-lane two-way street north of 10th Street.
- *Madison Street* is a north-south street through downtown connecting Lakeside Drive in the north with 2nd Street in the south. It is three southbound lanes between Lakeside Drive and 4th Street in Jack London District where it then becomes a two-way street with one lane each

way to 2nd Street where it terminates at the railroad tracks. Madison Street and Oak Street form a one-way couplet, although their extents differ.

- *Oak Street* is a north-south street through downtown connecting Lakeside Drive in the north with Embarcadero in the south. It is a two-way street with one lane each way from Embarcadero to 6th Street where it becomes a one-way street northbound with four lanes to 13th Street after which it transitions to two northbound lanes becoming Lakeside Drive after 14th Street. Oak Street and Madison Street form a one-way couplet, although their extents differ.
- *Grand Avenue* and *West Grand Avenue* together form a major east-west street extending from I-80 near the Bay Bridge Toll Plaza through West Oakland and downtown to I-580 where the street turns north and continues into Piedmont. West Grand Avenue, west of Broadway, is generally two lanes each way with a landscaped median. East of Broadway, Grand Avenue either has a striped median or no median.
- *20th Street* is an east-west street with one lane in each direction between Castro Street and Telegraph Avenue and two lanes in each direction east of Telegraph Avenue to Harrison Street. This street has been officially renamed Thomas L. Berkley Way, although it is still commonly identified as 20th Street. The Uptown Transit Center is located on 20th Street between Telegraph Avenue and Broadway.
- *12th Street* is a two-way east-west street that runs between Union Street and Market Street in West Oakland. East of Market Street, 12th Street transitions to a one-way westbound street, forming a one-way couplet with 11th Street, between Brush Street and Lake Merritt Boulevard. It is generally a three-lane westbound street to Franklin Street where it becomes four westbound lanes extending back to within a few hundred feet of Lake Merritt Boulevard where it becomes a three-lane street before terminating at Lake Merritt Boulevard.
- *11th Street* is an east-west street that runs from Market Street at 10th Street in the west through downtown to Lake Merritt Boulevard in the east. It is a one-way eastbound street, forming a one-way couplet with 12th Street, from west of Brush Street with four lanes extending east of Castro Street to Madison Street. East of Madison Street one lane continues to Oak Street while three lanes extend under Oak Street and intersect with Lake Merritt Boulevard.
- *8th Street* is an east-west street through downtown. It is a one-way street with four westbound lanes. It forms a one-way couplet with 7th Street through downtown. The Lake Merritt Bay Area Rapid Transit (BART) Station is located on the north side of 8th Street, west of its intersection with Oak Street.
- *7th Street* is an east-west arterial street that traverses through downtown connecting West Oakland and East Oakland. West of Fallon Street, 7th Street is one-way with four eastbound

lanes. It forms a one-way couplet with 8th Street through downtown. East of Fallon Street, 7th Street is a two-way, four-lane divided street.

b. Existing Transit Services

Transit service providers within the Plan Area include AC Transit, which provides local and Transbay bus service with connections to the Transbay Terminal in San Francisco; BART, which provide regional rail service, and Amtrak, which provides interregional rail. Broadway is the transit spine for downtown; most AC Transit lines serving downtown travel along Broadway at some point in their route, and both the 12th and 19th Street BART Stations provide access along Broadway. Intercity rail service and ferry service to San Francisco is in the Jack London District and connected to the center of downtown via several AC Transit bus lines. Transit services provided in downtown are shown on Figure V.B-2 and described below.

(1) 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. Eighteen AC Transit local lines, one Transbay line, and six all-nighter lines pass through or terminate in downtown, including five routes designated as Major Corridors. On a typical day, AC Transit serves about 18,000 riders in the area. Table V.B-1 summarizes the AC Transit lines operating in downtown.



AC Transit Bus

The Broadway "B" Shuttle also operates along the Broadway corridor and connects the Jack London District and Uptown between Jack London Square and Grand Avenue. The shuttle is administered by the City of Oakland and operated by AC Transit. The shuttle connects major destinations such as Jack London Square, City Center, and Uptown with major transportation services including BART, AC Transit, Amtrak, the Oakland Ferry Terminal, and the Greyhound station. The shuttle



Broadway "B" Shuttle



- Legend**
- Downtown Plan Boundary
 - BART Station Locations
 - BART Line
 - AC Transit Route
 - Railroad
 - Parks

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**Figure V.B-2
Transit Services**

TABLE V.B-1 AC TRANSIT LINES IN DOWNTOWN

Line	Primary Downtown Streets	BART Stations Served	Peak Period Frequency
Local Lines			
1 - International (Major Corridor)	Broadway, 20th Street, 11th and 12th streets (one-way couplet)	12th and 19th streets	7.5 minutes
6 - Telegraph (Major Corridor)	Broadway, 20th Street, Telegraph Avenue	12th and 19th streets	12 minutes
12 - Grand Avenue	Broadway, Grand Avenue	12th and 19th streets	10 minutes
14 - 14th Street and East 18th Street	14th Street	12th Street	15 minutes
18 - Martin Luther King Jr Way and Shattuck Avenue (Major Corridor)	Broadway, 20th Street, 7th Street	12th and 19th streets	15 minutes
19 - Buena Vista	11th and 12th streets (one-way couplet)	12th Street	20-minutes
20 - Webster Street and Park Boulevard (Major Corridor)	11th and 12th streets (one-way couplet)	12th Street	30 minutes
29 - Lakeshore Boulevard, Peralta Street, Hollis Street	11th and 12th streets (one-way couplet)	12th Street	20 minutes
33 - Oakland Avenue Park Boulevard	Broadway, 20th Street, 11th and 12th streets (one-way couplet)	12th and 19th streets	15 minutes
40 - Foothill Boulevard	11th and 12th streets (one-way couplet)	12th Street	10 minutes
51A - Broadway and College Avenue (Major Corridor)	Broadway, 7th and 8th streets (one-way couplet)	12th and 19th streets	10 minutes
62 - 7th Street and 23rd Street	7th Street	Lake Merritt	15 minutes
72/72M/72R (Major Corridor)	Broadway, San Pablo Avenue, 20th Street	12th and 19th streets	7.5 minutes (72/72M) and 12 minutes (72R)
88 - Market Street	11th and 12th streets (one-way couplet)	12th Street and Lake Merritt	15 minutes
96 - Alameda Point	11th and 12th streets (one-way couplet)	12th Street	15 minutes
314 - West Oakland and Alameda	11th and 12th streets (one-way couplet)	12th Street	Twice per day
Free Broadway Shuttle	Broadway	12th and 19th streets	12 minutes

TABLE V.B-1 AC TRANSIT LINES IN DOWNTOWN

Line	Primary Downtown Streets	BART Stations Served	Peak Period Frequency
Transbay Lines			
NL (Major Corridor)	20th Street	19th Street	15 minutes
All Nighter			
800	Clay and Broadway	12th and 19th streets	60 minutes
801	11th and 12th streets (one-way couplet)	12th Street	60 minutes
802	Broadway	12th and 19th streets	60 minutes
805	Broadway and 20th	12th and 19th streets	60 minutes
840	11th and 12th streets (one-way couplet)	12th Street	60 minutes
851	Broadway	12th and 19th streets	60 minutes

Source: AC Transit, 2019. AC Transit website summarized by Fehr & Peers. 2019.

operates on Monday through Thursday from 7:00 a.m. to 10:00 p.m., Fridays from 7:00 a.m. to 1:00 a.m., and Saturdays from 6:00 p.m. to 1:00 a.m., except on major holidays. The shuttle has headways of about 10 minutes during commute hours and lunch time, and 15 minutes during other times of the day.

Bus stops in downtown vary from a signpost only to full amenities including seating, shelters, line information, trash receptacles, and other street furniture elements. Bus stops are located both near- and far-side at signalized intersections.

(1) Bay Area Rapid Transit

All three stations are underground, each with multiple access points including stairs, escalators, and elevators. There are also several bus stops located near each BART access point. The Lake Merritt BART Station includes specific passenger pick-up/drop-off facilities; the Broadway stations does not contain such facilities, so private shuttle and automobile drivers often use curb space on Broadway to pick-up/drop-off passengers. Table V.B-2 summarizes the number of passengers using the three Downtown Oakland BART stations on a typical weekday. Table V.B-3 summarizes peak-hour loads near the downtown stations. Currently, all lines serving the East Bay to San Francisco Airport (SFO), Daly City, and Millbrae have AM peak hour load factors above BART's planning capacity (107 passengers per train car). The PM peak hour load factors also exceed BART's planning capacity in the reverse direction, from San Francisco to the East Bay. The Warm Springs-Daly City line, Dublin/Pleasanton-Daly City line, and Richmond-Daly City/Millbrae line are served by about four trains per peak hour while the Antioch-SFO/Millbrae line is served by up to ten trains.

TABLE V.B-2 DOWNTOWN BART STATION DAILY ENTRIES AND EXITS (WEEKDAY)

	Lake Merritt Station	12th Street Station	19th Street Station
Entries	8,023	14,619	14,728
Exits	7,962	14,476	14,476
Total	15,985	29,457	29,204

Source: BART, October 2018. Tuesday-Thursday ridership data provided by BART and summarized by Fehr & Peers. February 2019.



Amtrak in Jack London Square

TABLE V.B-3 BART PEAK-HOUR LOADS BY LINE

Peak Period	Line	Peak Hour	Trains During Peak Hour	Average Cars per Peak Hour Train	Average Maximum Load (Passengers/Car)	Load Factor
AM	Antioch – SFO/Millbrae	7:45 AM–8:45 AM	10	9	110	1.03
	SFO/Millbrae – Antioch	8:30 AM–9:30 AM	4	10	81	0.76
	Richmond – Daly City/Millbrae	8:00 AM–9:00 AM	4	10	124	1.16
	Daly City/Millbrae – Richmond	8:15 AM–9:15 AM	4	9	40	0.37
	Richmond – Warm Springs	7:45 AM–8:45 AM	4	6	53	0.50
	Warm Springs – Richmond	7:45 AM–8:45 AM	4	7	82	0.76
	Warm Springs – Daly City	8:15 AM–9:15 AM	4	10	142	1.32
	Daly City – Warm Springs	7:45 AM–8:45 AM	4	10	9	0.09
	Dublin/Pleasanton – Daly City	8:00 AM–9:00 AM	4	9	134	1.25
	Daly City – Dublin/Pleasanton	7:30 AM–8:30 AM	4	9	15	0.14
PM	Antioch – SFO/Millbrae	5:15 PM–6:15 PM	7	10	34	0.31
	SFO/Millbrae – Antioch	5:15 PM–6:15 PM	10	9	123	1.15
	Richmond – Daly City/Millbrae	5:00 PM–6:00 PM	4	9	43	0.41
	Daly City/Millbrae – Richmond	5:30 PM–6:30 PM	4	10	109	1.02
	Richmond – Warm Springs	4:45 PM–5:45 PM	4	7	82	0.76
	Warm Springs – Richmond	5:00 PM–6:00 PM	4	6	90	0.85
	Warm Springs – Daly City	5:00 PM–6:00 PM	4	10	17	0.16
	Daly City – Warm Springs	5:00 PM–6:00 PM	4	10	132	1.24
	Dublin/Pleasanton – Daly City	5:15 PM–6:15 PM	4	9	20	0.19
	Daly City – Dublin/Pleasanton	5:00 PM–6:00 PM	4	9	145	1.35

Note: **Bold** indicates load above capacity.

^a Load Factor defined as average load over the assumed design capacity (47 seats and 60 standing)

Source: BART, October 2018. Tuesday-Thursday data provided by BART and summarized by Fehr & Peers. February 2019.

(1) Regional Rail Service

Regional rail service is provided by Amtrak with a station in Jack London Square at the southern terminus of Alice Street. This station is served by the Capitol Corridor, an intercity heavy rail service operated between the Sierra Foothills, Sacramento, the East Bay, and San Jose. Amtrak operates two additional routes that stop at the Jack London Station: San Joaquin, which runs between the San Francisco Bay Area, Sacramento, and Bakersfield; and the Coast Starlight, which runs between Los Angeles, the San Francisco Bay Area, Portland, and Seattle. In 2016, average weekday ridership at Jack London Station was about 600 boardings per day. The station operates from 5:15 a.m. to 11:00 p.m. seven days per week.

Union Pacific Railroad (UPRR) owns and operates the rail lines through the Jack London District. There are at-grade crossings at Market Street and Martin Luther King Junior Way as well as Clay, Washington, Broadway, Franklin, Webster, and Oak streets. There are two UPRR mainline tracks at all the at-grade crossings except Market Street and Oak Street, where there are three tracks. In addition, Amtrak has a maintenance yard adjacent to UPRR's West Oakland Yard. The at-grade railroad cross characteristics are:

- *Market Street* on the north side of the railroad is a four-lane road with sidewalks on both sides. The crossing surface has been improved for motor vehicles, but the sidewalks terminate prior to the crossing. Bike lanes on Market Street terminate one block prior to the crossing at 3rd Street. The crossing serves truck access to Howard Terminal and Schnitzer Steel. The crossing has two flashing light signals with automatic gate arm warning devices, one in each direction, and is a designated truck route. There have been no train crashes at this crossing within the last 5 years.
- *Martin Luther King Junior Way* on the north side of the railroad is a four-lane road with on-street parking and sidewalks on both sides. South of the tracks it is a two-lane road with no sidewalks. The crossing surface has been improved for motor vehicles, but the sidewalks terminate prior to the crossing. The crossing serves motor vehicle access to Howard Terminal, the Vistra Power Plant, and other uses. The crossing has two flashing light signals with automatic gate arm warning devices, one in each direction, and is a designated truck route. There have been no train crashes at this crossing within the last 5 years.
- *Clay Street* is a two-lane road with on-street parking/loading and sidewalks on both sides of the railroad tracks, there is a striped crosswalk across the railroad tracks on the east side of the crossing, and there are bike lanes on Clay Street north of the crossing. The crossing surface has been improved for all users and extends from west of Clay Street through Jack London Square to Webster Street. The crossing serves commercial uses on both sides of the track, provides access to the Ferry Terminal, and is the designated Bay Trail route. The crossing has two flashing light signals with automatic gate arm warning devices, one in each direction. There have been no train crashes at this crossing within the last 5 years.

- *Washington Street* is a two-lane road with on-street parking/loading and sidewalks on both sides of the railroad tracks, there are striped crosswalks across the railroad tracks, and there are bike lanes on Washington Street one block north of the crossing at 3rd Street. The crossing surface has been improved for all users. The crossing serves commercial uses on both sides of the track and provides access to the Ferry Terminal. The crossing has two flashing light signals with automatic gate arm warning devices, one in each direction. There have been no train crashes at this crossing within the last 5 years. However, there was a train/pedestrian crash in 2017 between the Washington Street and Clay Street crossings when several pedestrians were injured.
- *Broadway* is a four-lane road with on-street parking/loading and sidewalks on both sides of the railroad tracks, there are striped crosswalks across the railroad tracks. The crossing surface has been improved for all users. The crossing serves commercial uses on both sides of the track and provides access to Jack London Square. The crossing has two flashing light signals with automatic gate arm warning devices, one in each direction. There have been no train crashes at this crossing within the last 5 years.
- *Franklin Street* is a one-way one-lane road with on-street parking/loading and sidewalks on both sides of the railroad tracks and there are striped crosswalks across the railroad tracks. The crossing surface has been improved for all users. The crossing serves commercial uses on both sides of the track. The crossing has two flashing light signals with automatic gate arm warning devices, one in each direction. There have been no train crashes at this crossing within the last 5 years.
- *Webster Street* is a two-lane road with on-street parking/loading and sidewalks on both sides of the railroad tracks and there is a striped crosswalk across the east side of the railroad tracks. The crossing surface has been improved for all users. The crossing serves commercial uses on both sides of the track. The crossing has three flashing light signals with automatic gate arm warning devices. There have been no train crashes at this crossing within the last 5 years.
- *Oak Street* is a two-lane road with on-street parking, bike lanes, and sidewalks on both sides of the railroad tracks except on the east side of the tracks where there is no sidewalk on the south side of the tracks. The crossing surface has been improved for all users. The crossing serves commercial uses on both sides of the track. The crossing has two gA warning devices. There have been no train crashes at this crossing within the last 5 years.

In addition to the at-grade railroad crossings, the Embarcadero operates on either side of the railroad tracks through the Jack London District. West of Market Street, the Embarcadero begins at Schnitzer Steel and continues east to Oak Street, parallel to the tracks intersecting the at-grade crossings. There is no railroad crossing safety equipment along Embarcadero at any of the

at-grade crossings except at Webster Street. South of Webster Street, the Embarcadero continues as a two-lane street on the south side of the railroad tracks separated by a fence.

(2) Ferry Service

The Jack London Square Ferry Terminal provides connections to all San Francisco terminals. In 2016, the average weekday ridership for the Oakland Terminal was approximately 1,700 passengers. Ferry riders can transfer for free to AC transit buses and are eligible for free parking in the 101 Washington parking garage. The weekday service operates between 6:00 a.m. and 9:25 p.m. with one-hour headways during the peak periods, and about two-hour headways during off-peak periods. The weekend service operates between 10:00 a.m. and 7:10 p.m. about every 90 minutes to 2 hours.



Jack London Square Ferry Terminal

c. Existing Bicycle Network

The City of 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. Class 2B bike lanes incorporate a buffer providing additional comfort and space from motor vehicles and/or parking. These facilities are typically 5 to 6 feet wide.
- 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 3B Neighborhood Bike Routes are located along streets with low traffic volumes where bikes share the roadway with automobiles. 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, these facilities 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

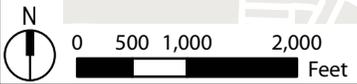
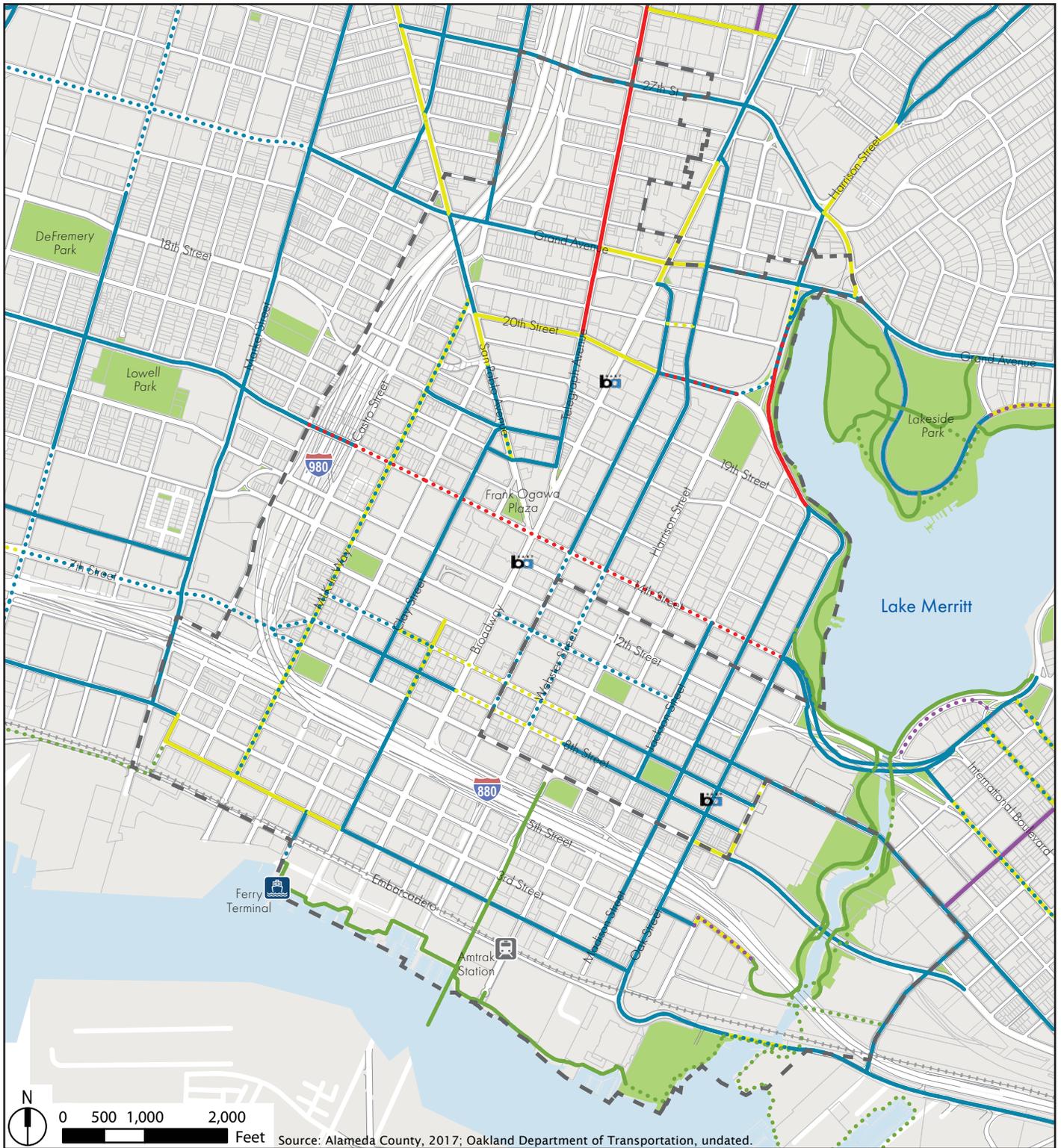
bikeway and the travel lanes (rather than between the bikeway and the sidewalk, as is typical for Class 2 bike lanes).



Figure V.B-3 shows the existing and planned bicycle facilities in downtown as of 2018 at the time of the NOP.³ Many of the City's bike facilities are being implemented over time as part of street repaving projects. As a result, existing bike facilities are not always continuous. Key bike facilities in downtown are:

- *Telegraph Avenue* provides Class 4 Protected Bicycle Lanes between 20th and 29th streets, buffered Class 2 Bicycle Lanes south of 20th Street, and a Class 3A Arterial Bicycle Route north of 29th Street. Class 4 Protected Bike Lanes are planned for Telegraph Avenue north of 29th Street.
- *Clay and Washington Street* currently have Class 2 Bike Lanes. The Clay Street lanes begin at San Pablo Avenue and extend south to 7th Street. Washington Street has Class 2 Bike Lanes between 7th and 2nd streets with route designations north of 7th Street to 10th Street. 8th and 9th streets provide east-west connectivity between Clay and Washington streets.
- *Broadway* currently provides a Class 3A Arterial Bicycle Route between Grand Avenue and 25th Street with Class 2 Bicycle Lanes north of 25th Street. There are no existing bike facilities south of Grand Avenue.
- *Franklin and Webster Streets* form a one-way couplet and currently have Class 2 Bike Lanes north of 14th Street extending up to Broadway. Both corridors are planned to have Class 2 Bike Lanes that would extend south to 8th Street.
- *Madison and Oak Streets* form a one-way couplet and generally provide Class 2 Bike Lanes between Lakeside Drive and 2nd Street. The lanes on Oak Street continue south across the railroad tracks to Embarcadero and across the Lake Merritt Channel.

³ The City is undertaking an update to the Bike Plan and so the bicycle facilities shown on Figure V.B-3 are subject to change depending on the Bike Plan outcomes. The Bike Plan does consider the Specific Plan recommendations for downtown which are discussed later in this chapter.



Source: Alameda County, 2017; Oakland Department of Transportation, undated.

Legend

- Downtown Plan Boundary
- Class 1 Bike Lane
- Class 4 Bike Lane
- BART Station Locations
- Class 2 Bike Lane
- Proposed Bike Lane
- Railroad
- Class 3A Bike Lane
- Parks
- Class 3B Bike Lane

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Figure V.B-3
Existing and Planned Bicycle Facilities

- *Grand Avenue* and *West Grand Avenue* provide Class 2 Bicycle Lanes between Lakeshore Avenue and Webster Street and between Telegraph Avenue and Market Street, and a Class 3A Arterial Bicycle Route between Webster Street and Telegraph Avenue.



Class 2: Washington Street



Class 3A: Broadway and 23rd Street

- *20th Street* currently has a Class 3A Arterial Bicycle Route between San Pablo Avenue and Telegraph Avenue and there are plans to continue these facilities to Broadway potentially restricting 20th Street between Telegraph Avenue and Broadway to bikes and buses only. East of Broadway a combination of Class 2 Bike Lanes and Class 4 Protected Bike Lanes are planned for 20th Street.
- *14th Street* currently has Bike Lanes west of Castro Street and east of Oak Street with a route designation through downtown. Class 4 Protected Bike Lane are planned for 14th Street through downtown between Castro Street and Oak Street. Once completed the corridor will have a continuous bike facility through West Oakland, downtown, and into East Oakland.
- *8th and 9th Streets* through downtown have a combination of Class 2 Bike Lanes and various bike route designations through downtown between Martin Luther King Jr Way and Fallon Street. These bike facilities converge to 7th Street in West Oakland Class 2 Bike Lanes are planned. East of downtown these facilities also converge on 7th Street with Class 2 Bike Lanes extending across the Lake Merritt Channel and into East Oakland.
- *2nd Street* through Jack London District is a combination of routes and Class 2 Bike Lanes with the bike lanes generally between Washington Street and Oak Street and the route designation west of Washington Street to Brush Street where the bike facility transitions to 3rd Street where Class 2 Bike Lanes continue west to Mandela Parkway.
- *Bay Trail* as a multi-use path extends along the water's edge through Jack London District between Clay Street and the Estuary Park where a planned facility would continue to the planned path along the Lake Merritt Channel. At Clay Street the Bay Trail turns inland and follows the alignment of 2nd Street to Brush Street and then to 3rd Street where it continues into West Oakland at 7th Street.
- *Lake Merritt Trail* as a multi-use path that follows the lake's shoreline and connects several parks and other attractions. There are plans to connect the Lake Merritt Trail with the Bay

Trail via a new bridge starting under the I-880 freeway and spanning over the Embarcadero and the Union Pacific Railroad tracks.

d. Existing Pedestrian Network

Pedestrian facilities generally include sidewalks, paths, and stairs. Other facilities might include marked crosswalks, curb ramps, pedestrian signal heads and buttons, lighting, curb extensions, and wayfinding signs.



Intersection of 19th and Telegraph



Wayfinding Signage at Jack London Square

The City of Oakland's downtown is about 1 square mile and provides about 49 miles of sidewalk. Roughly 32 percent of the curb ramps in downtown are not ADA compliant and no curb ramps are provided at about 9 percent of the street crossings. According to the 2017 Pedestrian Master Plan Update, 17 percent of the sidewalks in downtown are damaged and only 37 percent of the traffic signals in downtown have pedestrian signal heads. There are a few sidewalk gaps, generally in the western portion of the Jack London District.

The physical characteristics of the pedestrian network play a significant role in the quality of the environment. Whether the downtown is walkable also depends on what daily needs and services are within walking distance. The 2017 Pedestrian Master Plan Update used Walk Score to establish how walkable downtown is. Downtown Oakland measured a Walk Score of 97 out of 100 indicating, according to the Walk Score website, that the downtown is a walker's paradise, despite the issues noted in the prior paragraph, and daily errands do not require a car.⁴ The score does not account for many factors that may influence walking trips, such as the physical

⁴ Walkscore, Living in Downtown Oakland. Available at: <https://www.walkscore.com/CA/Oakland/Downtown>, accessed April 6, 2019.

characteristics discussed in the previous paragraph (driving speeds, sidewalk obstacles [or amenities], and sidewalk width).

e. Existing Traffic Conditions

Baseline traffic conditions in the Plan Area are described below.

(1) Vehicle Miles Traveled

VMT refers to the amount and distance of automobile travel attributable to a project. In 2013, Governor Brown signed Senate Bill (SB) 743, which added Public Resources Code Section 21099 to CEQA, to change the way that transportation impacts are analyzed in transit priority areas under CEQA to better align local environmental review with statewide objectives to reduce GHG emissions, encourage infill mixed-use development in designated priority development areas, reduce regional sprawl development, and reduce VMT in California.

The new law required the Office of Planning and Research (OPR) to develop guidelines to establish criteria for determining the significance of transportation impacts of projects in transit priority areas. The guidelines were adopted in December 2018. Oakland adopted VMT thresholds to implement the directive from SB 743 (discussed in more detail in the Local Regulatory Framework section). The majority of the Plan Area is in a transit priority area (as defined by MTC),⁵ and this Draft EIR provides an analysis of VMT impacts. SB 743 recommends VMT as an appropriate measure for assessing the transportation impact of a project on the environment. SB 743 states that VMT is a more appropriate measure than automobile delay, and that automobile delay as measure by an intersection level of service (LOS) is not an impact on the environment. Automobile delay is a measure of travel speed, and increased travel speed increases safety hazards and encourages automobile use, which increases GHG emissions and air quality impacts. SB 743 specifically targets automobile LOS as an inappropriate measure of environmental impact and encourages the use of VMT as an appropriate replacement measure.

Increased VMT leads to several direct and indirect impacts to 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 Energy and Climate Action Plan (updated March 2018), 57 percent of Oakland's sector-based GHG emissions are produced by transportation and land use. Making transportation

⁵ Metropolitan Transit Commission (MTC), Transit Priority Areas. Available at: http://opendata.mtc.ca.gov/datasets/d97b4f72543a40b2b85d59aco85e01ao_0?geometry=-122.383%2C37.78%2C-122.152%2C37.828, accessed April 6, 2019.

more efficient by reducing VMT per capita is the most effective means to reduce GHG emissions per capita.

This analysis uses the MTC Travel Model to estimate VMT. Based on the MTC Travel Model, the regional average VMT per capita for residential uses is 15.0 while the average for downtown is 4.8 under 2020 conditions. While regional VMT per worker is 21.8, the downtown average is 15.1 under 2020 conditions.

(2) CMP and MTS Roadway Segments

The Alameda County Transportation Commission (Alameda CTC) conducts periodic monitoring of the major roadways on the Congestion Management Program (CMP) roadway network and the Metropolitan Transportation System (MTS) in Alameda County. The monitoring program uses Level of Service (LOS) grades to define road segment operations. For the road segment analysis, the LOS grade system includes LOS (A, B, C, D, E, and F) ranges from LOS A representing free flow conditions with little to no motor vehicle delay to LOS F representing capacity conditions with extensive motor vehicle delay. The threshold between LOS E and LOS F represents the road segment capacity. Appendix F includes Transportation and Circulation Supplemental Information and provides Alameda CTC Roadway System Analysis data. As of the publication of the NOP, the most recent LOS Monitoring on the Congestion Management Program roadway network was released by Alameda CTC in December 2017.⁶ The Alameda CTC monitoring report assesses existing freeway operations through commercial speed data or “floating car” travel time surveys, which are conducted on all freeway segments during the evening peak hours (4:00 p.m. to 6:00 p.m.). Based on the results of these surveys, Alameda CTC assigns a LOS grade to each segment according to the method described in the 1985 HCM with the exception that Tier 2 arterial segments are reported using HCM 2000. Any freeway segment with an average speed less than 30 mph is assigned LOS F by Alameda CTC. Freeway ramps and special freeway segments with speeds below 50 percent of free flow speed are assigned LOS F. The travel time surveys concluded that 40 freeway segments, five freeway ramps and special freeway segments, and 16 arterial segments within Alameda County operate at LOS F during the PM peak hours, including the following 14 freeway segments and six freeway ramp and special freeway segments within or adjacent to the Plan Area:

⁶ Alameda County Transportation Commission (Alameda CTC), 2017. Congestion Management Program. Available at: https://www.alamedactc.org/wp-content/uploads/2018/11/2017_Alameda_County_CMP.pdf?x33781. accessed July 4, 2019.

Freeway Segments

- I-80 eastbound: Toll Plaza to I-580 (grandfathered segment)⁷
- I-580 eastbound: I-80 to I-980 (grandfathered segment)
- I-580 eastbound: I-980 to Harrison Street
- I-580 eastbound: Harrison Street to Lakeshore Avenue
- I-580 eastbound: Coolidge Avenue to SR 13
- I-580 westbound: SR 24 to I-80/580 Split (grandfathered segment)
- I-880 northbound: between I-80 Ramps
- I-880 southbound: between I-80 merge to Junction 980
- I-880 southbound: between I-980 to 23rd Avenue
- SR 13 northbound: Moraga Avenue to Hiller Drive
- SR 13 southbound: Redwood Road to I-580
- SR 24 eastbound: I-580 to Broadway/SR 13 (grandfathered segment)
- SR 24 eastbound: Broadway/SR 13 to Caldecott Tunnel (grandfathered segment)
- SR 24 eastbound: Caldecott Tunnel to Fish Ranch Road (grandfathered segment)

Freeway Ramps

- I-80/I-580 Interchange: I-580 westbound to I-80 northbound
- I-580/SR 24 Interchange: I-580 westbound to SR 24 eastbound
- I-580/SR 24 Interchange: SR 24 westbound to I-580 eastbound
- SR 13/SR 24 Interchange: SR 13 northbound to SR 24 eastbound (grandfathered segment)
- I-880/SR 260 Connection: SR 260 eastbound to I-880 northbound
- I-880 Northbound Off-Ramp to 5th Street/Broadway intersection

In addition, the travel time surveys concluded that 28 freeway segments, three freeway ramps and special freeway segments, and six arterial segments within Alameda County operate at LOS F during the AM peak hours, including the following eight freeway segments and one freeway ramp and special freeway segment in the Plan Area:

Freeway Segments

- I-80 westbound: I-580 to Toll Plaza
- I-80 westbound: Toll Plaza to San Francisco County
- I-580 westbound: Foothill Boulevard to MacArthur Boulevard/SR 13
- I-580 westbound: SR 13 to Fruitvale Avenue

² Grandfathered segments operated at LOS F during the initial data collection effort in 1991 by the Alameda County Congestion Management Agency, a predecessor to Alameda CTC, and are therefore “grandfathered,” meaning that they are exempt from LOS standards. The other segments are not exempt meaning that they operate at unacceptable conditions based on Alameda CTC standards. Alameda CTC requires preparation of a deficiency plan for non-grandfathered segments that fail to meet the established standards.

- I-580 westbound: SR 24 to I-880/580
- I-880 northbound: SR 112 to Hegenberger Road
- I-880 northbound: Hegenberger Road to High Street/42nd Avenue
- I-880 northbound: High Street/42nd Avenue to 23rd Avenue

Freeway Ramps

- I-880/SR 260 Connection: SR 260 eastbound to I-880 northbound

Based on the LOS Monitoring Report, all non-freeway CMP and MTS roadway segments in the Plan Area operate at LOS E or better during both AM and PM peak hours.

f. Planned Transportation Network Changes

Changes are planned for the various transportation modes in the Plan Area, as described below. These are changes that would be implemented regardless of the Specific Plan outcome. Planned changes include improvement projects planned by the City of Oakland or AC Transit. Changes that have full approval and funding are assumed in the analysis of future conditions in this Draft 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.

(1) Planned Roadway Changes

The Alameda County Transportation Commission (Alameda CTC) is planning the Oakland Alameda Access Project. The project will identify potential freeway access and multi-modal roadway improvements between I-880, I-980, and the Posey-Webster Tubes that connect the cities of Oakland and Alameda. The project is currently undergoing technical studies and stakeholder meetings with the expectation that the environmental document will be released in late 2019 and the final environmental documentation will be completed and approved in the Fall 2020. Final design and construction are not scheduled at this time and project funding would come from several sources, the amounts of which have not been fully allocated. This project is not considered in the EIR analysis because a design alternative has not been established, its schedule for design and construction is unknown, and it does not have an environmental document.

(2) Planned Transit Changes

AC Transit is constructing the East Bay Bus Rapid Transit (BRT) project between the Uptown Transit Center (located on 20th Street between Broadway and Telegraph) and the San Leandro BART Station. BRT Station platforms will allow level boarding and pre-payment so loading and unloading passengers is more efficient, and buses will arrive every seven minutes during the daytime. BRT will operate in dedicated lanes along most of the corridor, although buses along

Broadway would operate in lanes shared with other motor vehicles. Planned BRT Stations located within the Plan Area will be located on 11th Street, 12th Street, and Broadway.

(3) Planned Bicycle/Pedestrian Changes

The City of Oakland 2019 Let's Bike Oakland proposes a number of changes to the bicycle facilities in the Plan Area. The facility changes listed below are within the plan area and are assumed in the EIR analysis because they are under design development and funded. The planned bicycle facilities in downtown are shown on Figure V.B-3.

- *Telegraph Avenue.* The City of Oakland received funding to construct the permanent bikeway design on Telegraph Avenue between 20th and 29th streets. The Telegraph Avenue project would essentially replace today's interim condition, which uses paint and plastic, to a permanent condition with raised features such as bus boarding islands. This project is assumed in the EIR analysis because the Plan is in design development and fully funded.
- *20th Street.* Class 2 Bicycle Lanes and Class 4 Protected Bicycle Lanes between Harrison Street and Broadway, Class 3A between Broadway and Telegraph Avenue (through the Uptown Transit Center), and Class 2 Bicycle Lanes west of Telegraph Avenue. This project is assumed in the EIR analysis because it is in design development and fully funded through grants.
- *Harrison Street.* Class 4 Protected Bicycle Lanes between 20th and 27th streets. This project is assumed in the EIR analysis because it is under construction.
- *Martin Luther King Jr. Way.* Class 2 Bicycle Lanes between 2nd and 20th streets. This project is assumed in the EIR analysis because it would be completed as part of street resurfacing projects and include a road diet from 4 to 2 lanes to accommodate the bicycle lanes.
- *Clay Street.* Class 2 Bicycle Lanes between 8th and 20th streets. This project is assumed in the EIR analysis because it would be completed as part of street resurfacing projects.
- *Franklin Street.* Class 2 Bicycle Lanes between 8th Street and Broadway at 22nd Street in the northbound direction with the potential for a southbound lane as well. This project is assumed in the EIR analysis because it would be completed as part of street resurfacing projects.
- *Webster Street.* Class 2 Bicycle Lanes between 8th and 20th streets in the northbound direction. This project is assumed in the EIR analysis because it would be completed as part of street resurfacing projects.
- *27th Street.* Class 4 Protected Bicycle Lanes between Grand Avenue and Broadway and Class 2 Bicycle Lane west of Broadway. This project would not be assumed in the EIR analysis because it is not funded.

g. 2040 Traffic Forecasts

The Alameda CTC Travel Demand Model released in May 2018 was used to forecast growth in traffic due to anticipated development outside the downtown area. The travel demand model is consistent with ABAG Plan Bay Area land use projections (as published in ABAG Projections 2017). The resulting growth in traffic due to land use growth outside the downtown area is shown in Appendix F. Also noted in Appendix F is the growth associated with development described in the City's Major Projects List, as well as development at Howard Terminal as described in its NOP. These forecasts were used in *Section V.C, Air Quality*, and *Section V.K, Noise*.

2. Regulatory Framework

This section outlines the existing plans, policies, and regulations that relate and apply to the Specific Plan Area at the local, regional, and State levels.

a. Local Regulatory Framework

The City of Oakland's General Plan comprises numerous elements, with policies relevant to transportation resources primarily contained 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 Specific Plan is reviewed for compliance with the following local plans and policies:

- General Plan LUTE;
- City of Oakland Pedestrian Master Plan (incorporated into the City's General Plan);
- City of Oakland Bicycle Master Plan (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 Standard Conditions of Approval and Uniformly Applied Development Standards; and
- September 21, 2016, City of Oakland Planning Commission, update to Oakland's CEQA Thresholds of Significance Guidelines aligning with SB 743.⁸

⁸ Steinberg, 2013. Available at: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743, accessed March 10, 2017.

(1) General Plan

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 the California Environmental Quality Act (CEQA).⁹

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:

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."

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.

⁹ City Council Resolution No. 79312 C.M.S., adopted June 2005.

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 “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.

Pedestrian Master Plan

Oakland’s Pedestrian Master Plan *Oakland Walks!* was published in 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:

- **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 Oakland Bicycle Master Plan Update was adopted 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.

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% 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 they reflect 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

(2) 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.

(3) City of Oakland Complete Street Policy

The City of Oakland adopted the Complete Street 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.

(4) Standard Conditions of Approval

The City's Standard Conditions of Approval (SCAs) that directly pertain to transportation and circulation and that apply to in downtown are listed below. If the Specific Plan is adopted by the City, all applicable SCAs will be adopted as conditions of approval for future development and required, as applicable, of individual development projects to help ensure no significant impacts. Because the conditions of approval are incorporated as part of the Specific Plan, they are not listed as mitigation measures. SCA-UTL-2: Construction Management Plan (#13) also addresses construction impacts related to traffic control and is listed in *Section V.N, Utilities*.

SCA-TRANS-1: Construction Management Plan (#13)

Prior to issuance of a demolition, grading, or building permit.

Requirement: Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan (CMP) for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department, Department of Transportation, and the Public Works Department as directed. The CMP shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The CMP shall provide project-specific information

including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

SCA-TRANS-2: Construction Activity in the Public Right-of-Way (#76)

Prior to issuance of a demolition, grading, or building permit.

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.

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.

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.

SCA-TRANS-3: Bicycle Parking (#77)

Prior to issuance of a demolition, grading, or building permit.

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.

SCA-TRANS-4: Transportation Improvements (#78)

Prior to issuance of a demolition, grading, or building permit.

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 guideline 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. By-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)

SCA-TRANS-5: Transportation and Parking Demand Management (#79)

Prior to issuance of a final inspection of the building permit.

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 AM or PM peak hour vehicle trips: 10% VTR.
 - Projects generating 100 or more net new AM or PM peak hour vehicle trips: 20% 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. 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 space 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 the 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	<ul style="list-style-type: none"> ▪ A bus boarding bulb or island does not already exist, and a bus stop is located along the project frontage; and/or ▪ 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	<ul style="list-style-type: none"> ▪ A stop with no shelter is located within the project frontage, or ▪ The project is located within 0.10 miles of a flag stop with 25 or more boardings per day
Concrete bus pad	<ul style="list-style-type: none"> ▪ A bus stop is located along the project frontage and a concrete bus pad does not already exist
Curb extensions or bulb-outs	<ul style="list-style-type: none"> ▪ Identified as an improvement within site analysis
Implementation of a corridor-level bikeway improvement	<ul style="list-style-type: none"> ▪ 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 ▪ The project would generate 500 or more daily bicycle trips
Implementation of a corridor-level transit capital improvement	<ul style="list-style-type: none"> ▪ A high-quality transit facility is in a local or county adopted plan within 0.25 miles of the project location; and ▪ 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.	<ul style="list-style-type: none"> ▪ Always required
Installation of safety improvements identified in the Pedestrian Master	<ul style="list-style-type: none"> ▪ When improvements are identified in the Pedestrian Master Plan along project frontage or at an adjacent

Improvement	Required by code or when...
Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.)	intersection
In-street bicycle corral	<ul style="list-style-type: none"> 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.
Intersection improvements ¹⁰	<ul style="list-style-type: none"> Identified as an improvement within site analysis
New sidewalk, directional curb ramps, curb and gutter meeting current City and ADA standards	<ul style="list-style-type: none"> Always required
No monthly permits and establish minimum price floor for public parking ¹¹	<ul style="list-style-type: none"> If proposed parking ratio exceeds 1:1000 sf. (commercial)
Parking garage is designed with retrofit capability	<ul style="list-style-type: none"> Optional if proposed parking ratio exceeds 1:1.25 (residential) or 1:1000 sf. (commercial)
Parking space reserved for car share	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Typically required
Pedestrian crossing improvements	<ul style="list-style-type: none"> Identified as an improvement within site analysis
Pedestrian-supportive signal changes ¹²	<ul style="list-style-type: none"> Identified as an improvement within operations analysis
Real-time transit information system	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> A project is located within 0.10 mile of any active bus stop that is currently nearside
Signal upgrades ¹³	<ul style="list-style-type: none"> Project size exceeds 100 residential units, 80,000 sf. of retail, or 100,000 sf. of commercial; and Project frontage abuts an intersection with signal infrastructure older than 15 years
Transit queue jumps	<ul style="list-style-type: none"> Identified as a needed improvement within operations analysis of a project with frontage along a Tier 1 transit

¹⁰ Including but not limited to visibility improvements, shortening corner radii, pedestrian safety islands, accounting for pedestrian desire lines.

¹¹ May also provide a cash incentive or transit pass alternative to a free parking space in commercial properties.

¹² 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.

¹³ Including typical traffic lights, pedestrian signals, bike actuated signals, transit-only signals.

Improvement	Required by code or when...
Trenching and placement of conduit for providing traffic signal interconnect	<p>route with 2 or more routes or peak period frequency of 15 minutes or better</p> <ul style="list-style-type: none"> ▪ Project size exceeds 100 units, 80,000 sf. of retail, or 100,000 sf. of commercial; and ▪ Project frontage block is identified for signal interconnect improvements as part of a planned ITS improvement; and ▪ A major transit improvement is identified within operations analysis requiring traffic signal interconnect
Unbundled parking	<ul style="list-style-type: none"> ▪ 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 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 Bikeway Projects, on-site signage and bike lane striping.
 - Installation of safety elements per the Pedestrian Master Plan (such as cross walk 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, trash receptacles per the Pedestrian Master Plan Update, the Master Street Tree List and Tree Planning Guidelines (which can be viewed at <http://www2.oaklandnet.com/oakca1/groups/pwa/documents/report/oako42662.pdf> and <http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oako25595.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 sponsor and subject to review by the City, if the employees or residents use transit or commute by other alternative modes.
 - Provision of an ongoing contribution to 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 or streetcar 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 (Scenario3).
 - 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.
- Onsite carpooling and/or vanpooling 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 proposed 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.

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.

c. TDM Implementation – Operational Improvements

Requirement: For projects that generate 100 or more net new AM or PM peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first 5 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.

SCA-TRANS-6: Transportation Impact Fee (#80)

Prior to issuance of a demolition, grading, or building permit.

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).

SCA-TRANS-7: Railroad Crossings (#82)

Prior to issuance of a demolition, grading, or building permit.

Requirement: The project applicant shall submit for City review and approval a Diagnostic Review to evaluate potential impacts to at-grade railroad crossings resulting from project-related traffic. In general, the major types of impacts to consider are collisions between trains and vehicles, trains and pedestrians, and trains and bicyclists. The Diagnostic Review shall include specific traffic elements, such as roadway and rail description, accident history, traffic volumes (all modes, including pedestrian and bicyclist crossing movements), train volumes, vehicular speeds, train speeds, and existing rail and traffic control.

Where the Diagnostic Review identifies potentially substantially dangerous crossing conditions at at-grade railroad crossings caused by the project, measures relative to the project's traffic contribution to the crossings shall be applied through project redesign and/or incorporation of the appropriate measures to reduce potential adverse impacts at the crossings. These measures may include, without limitation, the following:

- a. Installation of grade separations at crossings, i.e., physically separating roads and railroad tracks by constructing overpasses or underpasses
- b. Improvements to warning devices at existing highway rail crossings that are impacted by project traffic
- c. Installation of additional warning signage
- d. Improvements to traffic signaling at intersections adjacent to crossings, e.g., signal preemption
- e. Installation of median separation to prevent vehicles from driving around railroad crossing gates
- f. Where sound walls, landscaping, buildings, etc. would be installed near crossings, maintaining the visibility of warning devices and approaching trains
- g. Prohibition of parking within 100 feet of the crossings to improve the visibility of warning devices and approaching trains
- h. Construction of pull-out lanes for buses and vehicles transporting hazardous materials
- i. Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- j. Elimination of driveways near crossings
- k. Increased enforcement of traffic laws at crossings
- l. Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

Any proposed improvements must be coordinated with California Public Utility Commission (CPUC) and affected railroads and all necessary permits/approvals obtained, including a GO 88-B Request (Authorization to Alter Highway Rail Crossings). The project applicant shall implement the approved measures during construction of the project.

SCA-TRANS-8: Plug-In Electric Vehicle (PEV) Charging Infrastructure (#83)

Prior to issuance of a demolition, grading, or building permit.

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 enough electrical capacity to supply the required PEV-Ready parking spaces.

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 enough electrical capacity to supply the required PEV-capable parking spaces.

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).

b. Regional Regulatory Framework**(1) Plan Bay Area 2040**

Plan Bay Area acts as both the Bay Area's Regional Transportation Plan, as well as its Sustainable Communities Strategy. Plan Bay Area grew out of "The California Sustainable Communities and Climate Protection Act of 2008"¹⁴ which requires each of the state's 18 metropolitan areas to reduce greenhouse gas emissions from cars and light trucks. Within Plan Bay Area, the MTC and the ABAG found the Bay Area consistently ranks as one of the most congested metropolitan areas in the nation. They concluded, however, that additional roadway capacity would not solve the problem and that the region must instead find ways to operate the existing highway and transit networks more efficiently. To that end, Plan Bay Area recommends increasing non-auto travel mode share and reducing VMT per capita and per employee by promoting transit-oriented development, transit improvements, and active transportation modes such as walking and bicycling. These strategies seek to not only improve mobility within the region, but also reduce regional and statewide GHG emissions. This Plan seeks to respond to these recommendations by promoting transit-oriented development downtown near regional transit lines and the commercial core, transit improvements, and active transportation modes.

¹⁴ Steinberg, 2013. Available at: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743, accessed March 10, 2017.

(2) Alameda County Transportation Commission

The Alameda County Transportation Commission (Alameda 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.¹⁵ 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 limits the scope of its review of local land use actions to those plans and projects with the potential to cause countywide or regional-scale impacts, including specific plans. The CTC's threshold for review is if the plan or project would cause a net increase of 100 PM peak-hour vehicle trips or more. The purpose of their review is to assess impacts of individual development actions on the regional transportation system and to ensure that significant impacts are appropriately mitigated. This analysis is conducted at the road segment level for year 2020 and year 2040.

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.

¹⁵ Alameda County Transportation Commission (Alameda CTC), 2017. Congestion Management Program. Available at: https://www.alamedactc.org/wp-content/uploads/2018/11/2017_Alameda_County_CMP.pdf?x33781. accessed July 4, 2019.

- **Other impacts and opportunities:** Noise impacts for projects near state highway facilities and opportunities to environmentally clear access improvements for transit-oriented development projects.

They also require an assessment of vehicle delay using the HCM 2010 methodology (unless an alternative methodology must be used to comply with local requirements) and consistency with adopted plans.¹⁶ Alameda CTC has not adopted thresholds of significance for CMP land use analysis purposes. Project sponsors should use professional judgment to 1) define a threshold that is appropriate for the project context; and 2) use this threshold to determine if segments are impacted.

c. State Regulatory Framework

(1) SB 743

On September 27, 2013, SB 743 was signed into law, building on legislative changes from SB 375, AB 32, and AB 1358, described above. SB 743 began the process to modify how impacts to the transportation system are assessed for purposes of CEQA compliance. These changes include the elimination of auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant impacts and instead utilize VMT. SB 743 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 require the OPR to update the CEQA Guidelines and establish criteria for determining the significance of transportation impacts of projects within transit priority areas. The revised CEQA Guidelines, including VMT thresholds, were finalized and became effective in December 2018, with one exception. Jurisdictions have until July 2020 to implement the new transportation thresholds.

(2) CPUC Rail Crossing Rules and Regulations

The CPUC includes several regulations, referred to as Commission General Orders (GO), that discuss railroad crossings. GO 88-B, specifically, establishes criteria for alterations of existing public highway-railroad crossings. Alterations must meet two criteria: the public agencies having jurisdiction over the roadway involved and the railroad corporation shall agree as to the public necessity for altering the existing highway-rail crossing and the proposed alteration shall comply

¹⁶ The 2017 CMP recognize that at the time the CMP was published, the California Governor’s Office of Planning and Research (OPR) was finalizing the rulemaking of SB 743 which eliminates auto delay based measures as a criteria for significance for transportation impacts within Transit Priority Areas (and potentially outside of Transit Priority Areas) and notes that the Alameda CTC will revisit the required and preferred methodologies for its Land Use Analysis Program after revised CEQA Guidelines are adopted. As of the publication of the NOP for the Downtown Specific Plan, the CMP has not yet been updated. Jurisdictions have until July 2020 to implement the new transportation thresholds.

with all applicable Commission GO. Additional guidance on rail crossing alterations is included in the CPUC Rules of Practice and Procedure, Rule 3.7: Public Road Across Railroad and Rule 3.8: Alter or Relocate Existing Railroad Crossing.

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section describes environmental impacts related to transportation and circulation that could result from the implementation of the Specific Plan and reasonably foreseeable development expected to occur under the Plan. The section begins with the criteria of significance that establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the Specific Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

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 743¹⁷ 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.

The City of Oakland has established thresholds for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan and/or the associated development would have a significant impact if any of the following would occur:

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.

¹⁷ Steinberg, 2013. Available at: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743, accessed March 10, 2017.

- For retail uses, a project would cause substantial additional VMT if it exceeds the existing regional VMT per worker minus 15 percent.
 - For retail projects greater than 80,000 square feet, a project would cause substantial additional VMT if it results a net increase in citywide total VMT per service population.¹⁸
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., by adding new mixed-flow lanes) or by adding new roadways to the network.

The City's current thresholds do not include any thresholds specific to Alameda CTC's requirement for an assessment of impacts on the regional transportation network. As discussed in Section 2, Regulatory Framework, above, the Alameda CTA reviews land use actions, such as a specific plan, that would cause a net increase of 100 PM peak-hour vehicle trips or more. The Alameda CTC guidelines state that impacts to all modes should be considered. To assess vehicle delay on the regional CMP roadway segments near the project site, Alameda CTC requires use of the Alameda CTC Travel Demand Model. Alameda CTC has not adopted thresholds of significance for CMP land use analysis purposes. In response to this, a fourth criterion is included:

4. For the Alameda CTC analysis, the City of Oakland based on its professional judgement has determined that the implementation of the Specific Plan would have a significant impact on CMP roadway segments if implementation for the Plan would cause:
 - A facility operating at LOS E or better deteriorates to LOS F.
 - A facility operating at LOS F continues to operate at LOS F with an increase in the V/C ratio of 0.03 or more.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statues and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions

¹⁸ While this is not a stated significance criterion in the City of Oakland, it is used here because it is consistent with California Office of Planning and Research (OPR) guidance that recommends that "agencies should analyze the effects of a retail project by assessing the change in total VMT, because retail projects typically re-route travel from other destinations."

have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Project Analysis and Methodology

(1) Trip Generation

Trip generation is the process of estimating the number of vehicles that would likely access the Plan Area; in this case the proposed new development associated with the Specific Plan. Trip generation data published by the Institute of Transportation Engineers (ITE) in Trip Generation Manual (10th Edition) was used as a starting point to estimate the vehicle trip generation. The ITE data is based on data collected at mostly single-use suburban sites where the automobile is often the only travel mode. However, downtown is in a dense mixed-use urban environment where many trips are walk, bike, or transit trips. Downtown is served by the Lake Merritt, 12th Street, and 19th Street BART Stations as well as the Amtrak Station and Ferry Terminal, and well connected with AC Transit bus routes. Therefore, this analysis reduces the ITE based trip generation by 43 percent to account for the non-automobile trips. This reduction is consistent with City of Oakland Transportation Impact Study Guidelines and is based on the US Census Commute Data for Alameda County from the 2014 5-Year Estimate of the American Community Survey (ACS) which shows that the non-automobile mode share within ½-mile of a BART station in Alameda County is about 43 percent.

Pass-by trips are trips attracted to a site from adjacent roadways as an intermediate stop on the way to a destination. Pass-by trips alter travel patterns in the immediate study area, but do not add new vehicle trips to the roadway network and should therefore be excluded from trip generation estimates. According to ITE's Trip Generation Handbook (3rd Edition), the average weekday PM peak hour pass-by reduction is 34 percent for retail uses. No pass-by reductions were applied to the AM peak hour and it was assumed that daily there would be a 17 percent reduction.

Table V.B-4 summarizes trip generation for the Specific Plan's proposed development envelope. Buildout of the downtown is estimated to generate about 210,310 net new daily vehicle trips and 15,625 AM peak hour and 19,135 PM peak hour vehicle trips. Table V.B-5 summarizes the net new trips generated by auto, transit, bike, and pedestrian travel modes.

(2) Automobile Trip Distribution and Assignment

The trip distribution and assignment process is used to estimate how the vehicle trips generated by the development under the Plan would be distributed and assigned across the roadway network. The Alameda CTC Travel Demand Model released in May 2018 was used to establish the automobile trip distribution and assignment for the land use growth assumed in the downtown.

TABLE V.B-4 AUTOMOBILE TRIP GENERATION – DOWNTOWN OAKLAND SPECIFIC PLAN

Land Use, ITE Code	Units ^a	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Residential ^b	29,100 du	158,600	2,209	7,394	9,603	7,700	4,522	12,222
Retail ^c	3,220 ksf	63,740	1,092	670	1,762	3,406	3,689	7,095
Office ^d	18,150 ksf	183,500	15,453	2,516	17,969	3,049	16,009	19,058
Industrial ^e	260 ksf	1,050	80	11	91	9	63	72
Non-Auto Reduction (46.9%)^f		-190,830	-8,833	-4,967	-13,800	-6,643	-11,389	-18,032
Pass-by-Reduction ^e		-5,750	0	0	0	-615	-666	-1,281
Total Trips		210,310	10,001	5,624	15,625	6,906	12,228	19,134

^a DU = Dwelling Units, KSF = 1,000 square feet.

^b ITE Trip Generation (10th Edition) land use category 220 (Multifamily Housing (Mid-Rise) – Adj. Streets, 7-9 AM, 4-6 PM). The average rates derived using fitted curve equations assuming a typical residential development in downtown will be 500 units:

Daily: $T = 5.45(X)$
 AM Peak Hour: $T = 0.33(X)$ (23% in, 77% out)
 PM Peak Hour: $T = 0.42(X)$ (63% in, 37% out)

^c Includes retail, neighborhood commercial, and flex uses. ITE Trip Generation (10th Edition) land use category 820 (Shopping Center – Adj. Streets, 7-9 AM, 4-6 PM):

Daily: $\ln(T) = 0.68 * \ln(X) + 5.57$
 AM Peak Hour: $T = 0.5(X) + 151.78$ (62% in, 38% out)
 PM Peak Hour: $\ln(T) = 0.74 * \ln(X) + 2.89$ (48% in, 52% out)

^d Includes office and institutional uses. ITE Trip Generation (10th Edition) land use category 710 (General Office Building – Adj. Streets, 7-9 AM, 4-6 PM). The average rates derived using fitted curve equations assuming a typical office development in downtown will be 500 KSF:

Daily: $T = 10.11(X)$
 AM Peak Hour: $T = 0.99(X)$ (86% in, 14% out)
 PM Peak Hour: $T = 1.05(X)$ (16% in, 84% out)

^e ITE Trip Generation (10th Edition) land use category 110 (Light Industrial – Adj. Streets, 7-9 AM, 4-6 PM):

Daily: $T = 3.79(X) + 57.96$
 AM Peak Hour: $\ln(T) = 0.74 * \ln(X) + 0.39$ (88% in, 12% out)
 PM Peak Hour: $\ln(T) = 0.69 * \ln(X) + 0.43$ (13% in, 87% out)

^f The 46.9% reduction is based on data from the April 2017 City of Oakland Transportation Impact Study Guidelines for development in an urban environment within ½ miles of a BART station, Ferry or Rail Terminal, or major transit corridor.

^g PM peak hour pass-by rates based on ITE Trip Generation Handbook (3rd Edition). The weekday PM peak hour average pass-by rates for land use category 820 is 34%. Pass-by rates are not applied to the AM peak hour. Half of the reduction (17%) is applied to the daily trips. Reductions are applied after the non-auto reduction described above.

Source: Fehr & Peers, 2019.

The new automobile trips generated under the Plan on the road segments evaluated in this document are shown in Appendix F.

TABLE V.B-5 TRIP GENERATION BY TRAVEL MODE – DOWNTOWN OAKLAND SPECIFIC PLAN

Travel Mode	Mode Share Adjustment Factors^a (%)	Daily	Weekday AM Peak Hour	Weekday PM Peak Hour
Automobile	53.0	210,310	15,625	19,134
BART / AC Transit	29.7	117,630	8,739	10,702
BART		95,574	7,100	8,695
AC Transit		22,056	1,639	2,007
Bike	5.1	20,200	1,501	1,838
Walk	10.5	41,590	3,090	3,784
Total Trips		389,730	28,955	35,458

^a Based on City of Oakland Transportation Impact Study Guidelines assuming Plan Area is in an urban environment within 0.5 miles of a BART Station. BART and AC Transit ridership based on 2017 ACS Travel to Work Survey
Source: Fehr & Peers, 2019.

c. Analysis and Findings

(1) Vehicle Miles Travel (Criterion 1)

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, 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. As shown in the analysis below, the development associated with the Specific Plan is estimated to generate nearly half the automobile trips than the same development in a more suburban setting (see Table V.B-4). This is a result of the volume of non-automobile trips that occur within an urban transit-rich environment. Many vehicle trips are eliminated given many trips occur via foot, scooters or bikes, and transit. As discussed above and throughout the Specific Plan, the Plan Area is very accessible via transit including several BART stations, Amtrak, the Ferry, AC Transit, and the Broadway “B” Shuttle. As development intensifies within the Specific Plan Area an even greater reduction (more than 46.9 percent) will be realized.

The City of Oakland General Plan LUTE, as well as the City's Public Transit and Alternative Mode and Complete Streets Policies, state a strong preference for encouraging the use of non-automobile transportation modes, such as transit, bicycling, and walking. These policies favor the greatest mobility for people rather than vehicles giving due consideration to the environmental, public safety, economic development, health and social equity impacts. The Specific Plan would provide for high-density development in a compact area with excellent pedestrian and bicycle infrastructure and excellent access to transit.

The high usage of non-auto modes is due to the Specific Plan locating a diverse and dense set of land uses within proximity to transit. Major transit nodes include the Lake Merritt, 12th Street, and 19th Street BART Stations, Amtrak Station, and a Ferry Terminal; all of which are connected by AC Transit bus routes through downtown. By providing a mix of uses in a dense walkable urban environment with quality pedestrian, bicycle, and transit infrastructure and a limited parking supply, the Specific Plan encourages the use of non-automobile transportation modes. Policies and infrastructure improvements, as outlined in the Specific Plan, would also provide for safer and more attractive pedestrian, bicycle, and transit infrastructure and further encourage these activities.

Further supporting this preference for encouraging non-automobile transportation modes, the City of Oakland's SCA-TRANS-5: Transportation and Parking Demand Management (#79) requires developments under the Specific Plan to each implement TDM programs that directly encourage more residents, employees and visitors to shift from driving alone to other modes of travel. The TDM programs would consist of strategies that incentivize travel by non-automobile modes, such as discounted transit tickets and preferential carpool parking, and strategies that disincentive travel by automobile, such as higher parking fees. Refer to SCA-TRANS-5: Transportation and Parking Demand Management (#79) (page M-32 through M-37 for a complete list of potential measures.

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 Specific Plan. This analysis uses two travel demand models to fully analyze the VMT impacts of the Specific Plan. The VMT analysis for the residential and commercial components of the Specific Plan uses the MTC Travel Model while the VMT analysis for the retail component 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, and even larger geographic areas in lower density areas in the Oakland/Berkeley 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 onto 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 scenario.

The travel behavior from MTC Travel Model is modeled based on the following inputs:

- Socioeconomic data developed by ABAG.
- Population data created using 2000 US 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 Plan Area. In this way, all the VMT for an individual resident or worker is included; not just trips into and out of 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 capita is 15.0 under 2020 conditions and 13.8 under 2040 conditions, and 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 every TAZ in the nine-county Bay Area.

Alameda CTC Travel Model

The MTC model does not calculate retail-based service population VMT where service population is defined as workers plus residential population, and so the Alameda CTC travel model is used to estimate VMT for the retail component of the Specific Plan. Like the MTC Model, neighborhoods within Oakland are expressed geographically in TAZs. The Alameda CTC Travel Model includes approximately 370 TAZs within Oakland that vary in size. Generally, Oakland TAZs in the Alameda CTC model are smaller than those in the MTC model.

The travel behavior for the Alameda CTC Model is based on the same inputs as described above for the MTC Model but produces outputs differently. As opposed to the MTC's tour-based analysis, The Alameda CTC model is a trip-based analysis. That is to say that it tracks trips to and from TAZs (or project sites) but does not keep track of the entire chain of trips over the course of a day. Thus, the Alameda CTC model does not track VMT for a specific resident or worker over an entire day. The overall regional VMT estimated by the two models are comparable even though the two models use different methodologies to estimate VMT. The benefits of using the Alameda CTC Model compared to the MTC Model include:

- Increased granularity in Alameda County.
- Ease of use and fewer degrees of assumptions that could influence results.
- Consistency with regional planning despite less complexity than MTC Model.
- Ability to track retail trips.

Based on these factors, the Alameda CTC Model was used for the VMT analysis to capture city-level scale VMT impacts for the retail component of the Specific Plan using service population, while still maintaining consistency with the MTC Model and regional planning.

Specific Plan VMT Analysis Screening

This section evaluates impacts of the Specific Plan on the transportation network under Existing and 2040 conditions. As detailed above, the VMT impacts would be less than significant if implementation of the Specific Plan and/or its associated development would meet any of the screening criteria. As described below, the Specific Plan and/or its associated development would meet criterion 2 and 3 as described below. As a result, its VMT impacts would be less than significant.

Residential and Commercial VMT Analysis

This section describes the VMT per capita for the residential component of the Specific Plan and the VMT per worker for the commercial component of the Plan.

Criterion #1: Small Projects – generate fewer than 100 vehicle trips per day. Development that would occur under the Specific Plan would generate more than 100 trips per day and therefore does not meet Criterion #1.

Criterion #2: Low-VMT Areas – in an area that exhibits below threshold VMT, or 15 percent or more below the regional average. As shown in Table V.B-6, the 2020 and 2040 average daily VMT per capita and VMT per worker in the downtown TAZs are more than 15 percent below the regional averages. The Specific Plan would generate less VMT than 15 percent below the regional averages and its impact would be less than significant for the residential and commercial portions of the Plan.

TABLE V.B-6 DAILY VEHICLE MILES TRAVELLED PER CAPITA

Land Use	2020		2040		Average of TAZ 945, 946, 966, 967, 968, 969, 970, and 971	
	Regional Average	Regional Average Minus 15%	Regional Average	Regional Average Minus 15%	2020	2040
	Residential (VMT per capita) ^a	15.0	12.8	13.8	11.7	4.8
Commercial (VMT per worker) ^a	21.8	18.5	20.3	17.3	15.1	13.3

^a MTC Model results at analytics.mtc.ca.gov/foswiki/Main/PlanBayAreaVmtPerCapita and accessed in February 2019.

Source: Fehr & Peers, 2019.

Criterion #3: Near Transit Stations – in a Transit Priority Area or within a ½-mile of a Major Transit Corridor or Stop. The Plan Area is within a one-mile area that includes the Lake Merritt, 12th Street, and 19th Street BART Stations, the Amtrak Rail Station, and the Ferry Terminal; all of which are accessed via multiple AC Transit bus routes serving downtown and beyond.

The Plan and its associated development must also satisfy the following:

- **Has a Floor Area Ratio (FAR) of more than 0.75** – Development under the Specific Plan would have a FAR greater than 0.75. (Satisfied)
- **Does not include more parking for use by residents, customers, or employees 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)** – The City’s municipal code does not establish minimums or maximums for the areas within the Plan Area. Further, Specific Plan Policy M-3.3 establishes parking maximums. The proposed parking maximums would ensure excess parking is not permitted. (Satisfied)

- **Is consistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Transportation Commission)** – The Specific Plan is located within the Downtown Priority Development Area (PDA) as defined by Plan Bay Area and is therefore consistent with the region’s Sustainable Communities Strategy. (Satisfied)

Retail VMT Analysis

Development under the Specific Plan, which includes 3,220 million square feet of retail uses the majority of which is anticipated to be small- to medium-scale and not in excess of 80,000 square feet. However, it is not possible to know the maximum size of each individual retail project. As development occurs, the City will require any retail project in excess of 80,000 square feet to prepare a full VMT project analysis which would be required at such time a project is proposed. A full VMT analysis is recommended for potentially regional-serving retail because larger retail projects typically reroute travel from other destinations potentially increasing total VMT in the area under consideration.

To assess the VMT generated by the retail component of the Specific Plan and its associated development, the total accounting method was used to understand the development’s influence on overall city-wide travel behavior. As opposed to analyzing only project trips, analyzing the Specific Plan’s retail VMT impacts requires an understanding of how the proposed development would interact with the outside world, as adding housing to a jobs-rich area could reduce average vehicle trip length on a per capita basis, while adding jobs to an area with limited residential population could increase average trip length. This is consistent with OPR guidance that recommends that “agencies should analyze the effects of a retail project by assessing the change in total VMT, because retail projects typically re-route travel from other destinations.” This analysis was completed using the Alameda CTC travel demand model.

The base 2020- and 2040-year Alameda CTC Models were executed for the Specific Plan. Results are shown in Table V.B-7 for the Total Accounting Method¹⁹ (or Origin-Destination Method) for the retail component of the Plan. The City of Oakland VMT per service population (defined as total number of residents plus workers within the City of Oakland) is estimated at approximately 16.1 miles in 2020 and 17.2 miles in 2040 with or without the retail component of the Plan. While the Specific Plan has a slight overall increase in total VMT, the added employees from the Plan

¹⁹ The total account method, also known as origin-destination method, tracks all vehicle trips generated by the City of Oakland (including the proposed Project) across the entire regional network. These trips are then multiplied by the distance traveled to determine the total VMT, and this total is then divided by the total residential and employment populations to establish the VMT per service population.

absorb the increased VMT such that there is no substantial change in VMT per service population expected.

Projects with regional-serving retail would cause substantial additional VMT if it results in a net increase in citywide VMT per service population. As noted in Table V.B-7, the retail component of the Specific Plan maintains the same citywide VMT per service population of 16.0 for year 2020 and 17.2 for year 2040. Therefore, the retail component of the Specific Plan would not result in a significant VMT impact. This conclusion illustrates the transit-oriented and mixed-use benefits of locating retail development in downtown.

TABLE V.B-7 CITY OF OAKLAND VMT PER SERVICE POPULATION – FULL ACCOUNTING

	2020			2040		
	No Project	Plus Project	Difference	No Project	Plus Project	Difference
Population	534,400	4534,400	0	678,400	678,400	0
Employment	292,200	296,170	3,970	332,200	336,170	3,970
Service Population	826,600	830,570	39,570	1,010,600	1,014,570	3,970
Retail	13,261,000	13,311,000	50,000	17,347,000	17,394,000	47,000
Retail VMT/ Service Population	16.0	16.0	0.0	17.2	17.1	-0.1

^a Citywide VMT generated by City of Oakland as estimated by the Alameda CTC Model.
 Source: Alameda CTC Model and Fehr & Peers, 2019.

VMT Analysis Conclusions

Impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to VMT because:

- VMT generated by the Specific Plan would be more than 15 percent below the regional averages and would thus be less than significant for the residential and commercial portions of the Specific Plan.
- Citywide VMT per service population would remain the same without and with the retail component of the Specific Plan resulting in a less-than-significant VMT impact for the retail component of the Plan.

(2) Consistency with Transportation Policy (Criterion 2)

In general, the Specific Plan and its associated development are anticipated to be consistent with policies, plans and programs **addressing the safety or performance of the circulation system**, including transit, roadways, bicycle lanes, and pedestrian paths as summarized below and described in greater detail in *Chapter 4, Planning Policy*, of this EIR.

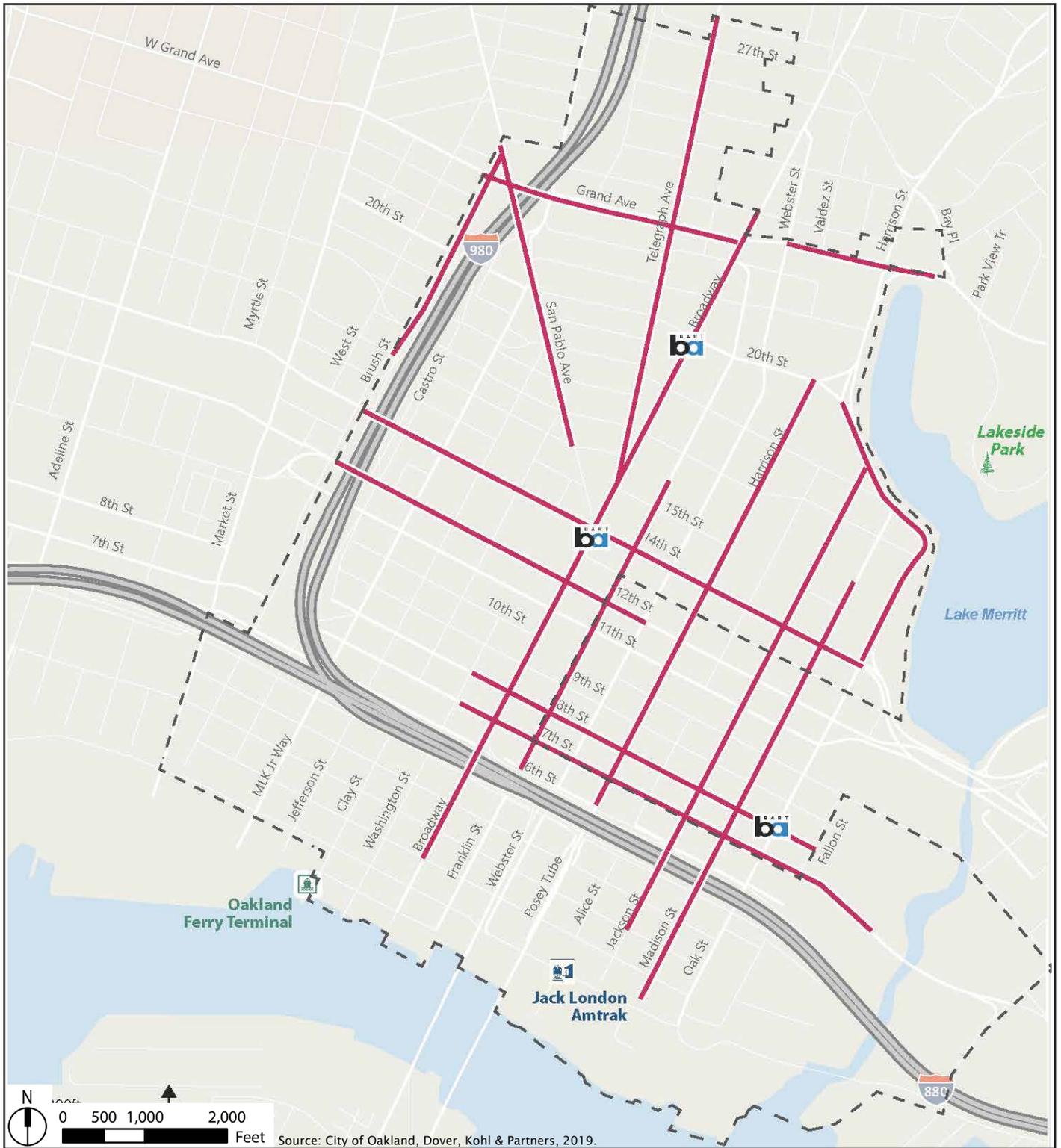
- The LUTE, which calls for promoting alternative means of transportation such as transit, biking, and walking, providing facilities that support alternative modes, and implementing street improvements.
- The Pedestrian Master Plan, which envisions a pedestrian system built on safety, equity, responsiveness, and vitality.
- The Bicycle Master Plan, which envisions a comprehensive network of bicycle facilities addressing bicycle safety and access through street design and maintenance programs; bicycle access to transit; and secure and convenient bicycle parking.
- The City's Transit First Policy, supporting public transit and other alternatives to the single occupant vehicle incorporating various methods of expediting transit services on designated street and encouraging greater transit use.
- The City's Complete Streets Policy, which calls for the City to plan, design, construct, operate, and maintain the street network to accommodate safe, convenient, comfortable travel for all modes, including pedestrians, bicyclists, transit users, motorists, trucks and emergency vehicles.

Adoption and implementation of the Specific Plan furthers the existing policies in these policy documents resulting in an overall beneficial impact on transportation in the Plan Area. Additional detail is provided in the subsequent sections.

Pedestrians

36 percent of Oakland's pedestrian injuries and fatalities occur on just 2 percent of its streets. Collectively these streets are referred to as Oakland's "High Injury Network", shown in Figure V.B-4. The pedestrian network changes have been identified to provide a connected pedestrian network of streets to accommodate pedestrians through a variety of treatments that enhance safety, convenience, and mobility. The changes focus on three key elements including safety, connectivity, and access. Related policies from the Specific Plan are listed below Figure V.B-5 illustrates the primary changes.

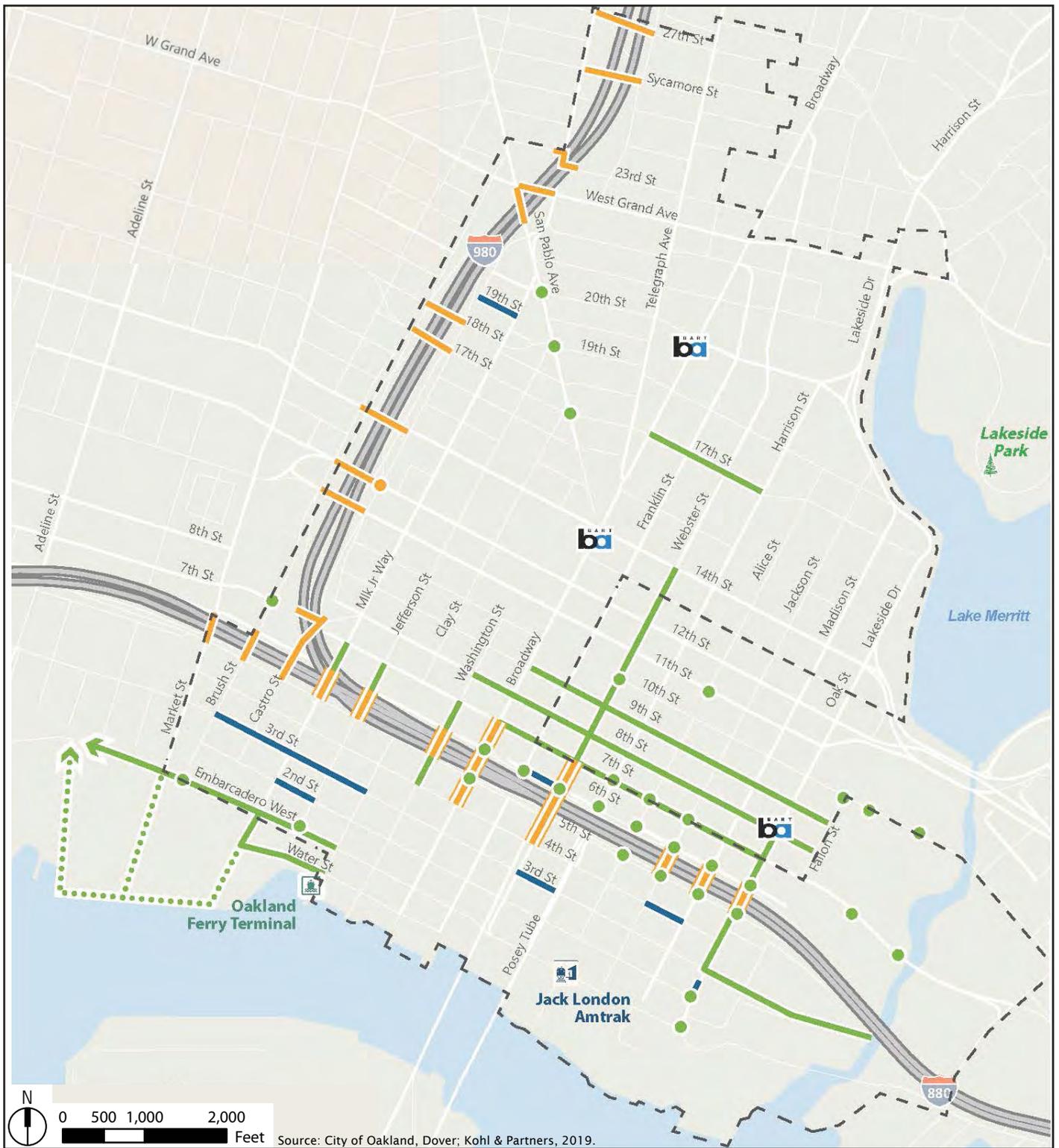
Outcome M-1: Downtown is well-connected across its internal and adjacent neighborhoods with bicycle and pedestrian networks that are accessible and safe for people of all ages and abilities.



- Legend**
- Downtown Plan Boundary
 - BART Station Locations
 - High Injury Network Corridor

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**Figure V.B-4
High Injury Network Corridors**



Source: City of Oakland, Dover, Kohl & Partners, 2019.

Legend

- Downtown Plan Boundary
- Sidewalk Closure Gap
- BART Station Locations
- Connectivity Improvement
- Freeway Crossing Improvement

Downtown Oakland Specific Plan EIR

Figure V.B-5
Proposed Pedestrian Connectivity and Access Improvements

Policy M-1.1: Design and construct safety measures along the high-injury pedestrian network, including ADA measures that support access for people with disabilities (as identified in Figure M-1 and described in Appendix Table M-1).

Policy M-1.2: Implement the pedestrian programs/policies for Downtown Oakland detailed in the 2017 Oakland Pedestrian Plan

Policy M-1.4: Design and construct connectivity and access improvements throughout downtown (as identified in Figure M-2 and M-3 and described in Appendix Table M-1 through M-3.)

Policy M-1.6: Update signal timing and upgrade signals throughout downtown to reduce the delay and support access for bicyclists, pedestrians, and transit.

Policy M-1.7: Install signals that accommodate two-way circulation as standard practice in all future intersections.

Policy M-1.5: Link neighborhoods with the waterfront through implementation of the Green Loop, West Oakland Walk, and other connectivity improvements.

Policy M-3.10: Adopt stronger regulations to ensure safe access for pedestrians, bicyclists, and transit riders of all abilities during construction projects Downtown.

The infrastructure changes noted on the figures in combination with the policies listed above yield a comprehensive set of projects in the Specific Plan (Appendix B, Table M-1 through Table M-3) that would generally enhance pedestrian access and safety. Designing and constructing safety measures and closing sidewalk gaps to improve connectivity encourages more people to choose to walk rather than drive or ride in an automobile. The projects identified in the Specific Plan, would be reviewed through the City's Design Review Process to ensure consistency with applicable design standards. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to consistency with adopted pedestrian policies, plans, and programs.

Bicyclists

The Specific Plan establishes a bicycle network based on the All Ages and Abilities philosophy, which is a national best practice. According to the National Association of City Transportation Officials these facilities attract more people to bicycling and reduce death and serious injury crashes.²⁰ The same organization states that these facilities are more comfortable and are likely

²⁰ National Association of City Transportation Officials, Urban Bikeway Design Guide, Available at: <https://nacto.org/publication/urban-bikeway-design-guide/designing-ages-abilities-new/>, accessed August 20, 2019.

to be used by nearly two-thirds of the adult population, and a well-connected bike system eliminates barriers to riding a bike, making bicycle riding a convenient mode choice. To be effective an all ages network must be well connected without gaps and have enough coverage so bicyclists can get to their desired destination whether it be for work, shopping, entertainment, or services as well as recreation destinations. To this end, the Specific Plan identifies a “low-stress” Core Bicycle Network to provide at least three high-quality bikeways in the east-west and north-south directions that connect into the surrounding neighborhoods, and a Vision Bicycle Network to Provide additional low-stress connections throughout downtown.

The low stress bicycle network proposed with the Specific Plan includes shared paths and physically separated bike lanes. These facilities are supplemented with bike lanes on streets where vehicle volumes and speeds are low. In all cases, these facilities would also be available to bikes as well as scooters and other micro-mobility devices that come on line in the future.

The Specific Plan distinguishes between the Core Network to establish east-west and north-south connections through the Plan area and into the surrounding neighborhoods and the Vision Network to provide additional low-stress connections throughout downtown. The Core Network shown on Figure V.B-6 is intended to provide low stress bike facilities on several corridors in the east–west direction and several corridors in the north-south direction. While Figure V.B-6 shows many low stress corridors, the Specific Plan specifically calls for at least three east-west and three north-south corridors that connect through to surrounding neighborhoods.

The Vision Network also shown on Figure V.B-6 identifies additional streets where low stress bike facilities would further enhance the connectivity for bicyclists. Related policies are listed below.

Outcome M-1: Downtown is well-connected across its internal and adjacent neighborhoods with bicycle and pedestrian networks that are accessible and safe for people of all ages and abilities.

Policy M-1.3: Plan and design for micro-mobility devices and users in transportation improvements
Actions include:

- Include micro-mobility devices and users in transportation improvements, including designated parking
- Digitize curb space to better manage curbs and associated regulations for parking, ride share and other activities;
- Install electric charging stations for bikes and scooters where appropriate, including ADA accessible spaces, however, ensure that due public process ensues and avoid yielding sidewalks and parks for private companies to install devices .
- Use pilot programs to experiment with new technology .

Policy M-1.4: Design and construct connectivity and access improvements throughout downtown (as identified in Figure M-2 and M-3 and described in Appendix Table M-1 through M-3).

The Oakland Athletics are currently proposing to relocate their ballpark to Howard Terminal. The unique nature of this proposed project may necessitate adjustments to this Bicycle Network to balance competing game-day demands on surrounding streets, including but not limited to Broadway, Market Street, Martin Luther King Jr. Way, Embarcadero West, and 3rd Street. While precise street segments on the Bicycle Network may change to accommodate these demands, high quality bicycle facilities to and from the ballpark will be incorporated in both the Howard Terminal project design and any revisions to the network envisioned herein to ensure safe and sustainable transportation to and from the waterfront.



Legend

- Downtown Plan Boundary
- ba BART Station Locations
- Low-stress Short-Term Network
- Low-stress Vision Network
- Shared-use path
- Potential Shared-use path connection through Howard Terminal
- Proposed Estuary Crossing
- Existing Bike Lane (outlined in white)
- Existing Signed Route

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Figure V.B-6
Proposed Low Stress Vision Bicycle Network

Policy M-1.5: Link neighborhoods with the waterfront through implementation of the Green Loop, West Oakland Walk, and other connectivity improvements.

Policy M-1.6: Update signal timing and upgrade signals throughout downtown to reduce the delay and support access for bicyclists, pedestrians, and transit.

Policy M-1.8: Design and construct a low-stress bicycle network throughout downtown (as identified in Figure M-2 and M-3 and described in Appendix Table M-4).

Policy M-1.10: Continue to expand bike parking supply including short-term and long-term facilities for both commercial and residential uses.

Outcome M-3: Oaklanders connect to Downtown’s resources with intermodal and multimodal options that accommodate people of all ages and abilities from their front door to their destination and back.

Policy M-3.1: Implement the City’s adopted Complete Streets Policies and focus on reconfiguring road space on public streets with excess capacity to other modes, such as bicycles, pedestrians, and transit, and loading/unloading. (Pedestrian improvements are proposed under Policies M-1.4 to M-1.8; bicycle improvements are proposed under Policy M-1.10; and transit improvements are proposed under policies in Outcome M-2. A map of proposed one-way to two-way conversions to achieve these multimodal strategies is illustrated in Figure M-9 and described in Appendix Table M-6.)

Policy M-3.10: Adopt stronger regulations to ensure safe access for pedestrians, bicyclists, and transit riders of all abilities during construction projects Downtown.

The bicycle infrastructure changes noted on the figures in combination with the policies listed above yield a comprehensive set of projects in the Specific Plan (Appendix B, Table M-4) These modifications would generally enhance bicyclist access and safety. Designing and constructing low stress bike networks and improving connectivity encourages more people to choose to bike rather than drive or ride in an automobile. The projects identified in the Specific Plan would be reviewed through the City’s Design Review Process to ensure consistency with applicable design standards. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to consistency with adopted bicycle policies, plans, and programs.

Transit

Downtown is rich with regional transit opportunities. The Lake Merritt, 12th Street, and 19th Street BART Stations provide regional connectivity throughout the East Bay and San Francisco. The Ferry terminal and intercity rail station in Jack London District provide additional regional and statewide connectivity. AC Transit is a crucial partner in this transit rich environment connecting people moving within downtown and the surrounding neighborhoods and adjacent

East Bay communities. The bus transit network has the greatest potential to improve access and mobility in downtown. The Specific Plan identifies infrastructure improvements (Figure V.B-7) that enhance bus operations and improve rider experience by reducing bus travel times and improving reliability. Bus-only lanes on several streets in the Plan Area including Broadway and Oak, 7th, 11th, and 12th streets prioritize buses on these corridors. The bus-only lanes would be provided by converting a lane for motor vehicles to a lane for buses only. In addition, the one-way street configuration on 7th Street would be converted to two-way so that bus-only lanes would be provided in both directions on 7th Street which prioritizes buses serving downtown, Chinatown, the City of Alameda, and East Oakland via the Lake Merritt BART Station. The Specific Plan also expands the bus network so that the Plan Area (shown on Figure V.B-7) is within one-half mile of regional transit or bus line(s) with combined headways equal to or less than 15 minutes. For example, expanded bus service through Jack London District via 3rd Street fully connects the District with bus service at 10-minute headways within one-half mile. Related Specific Plan policies that support the infrastructure improvements are listed below.

Outcome M-1: Downtown is well-connected across its internal and adjacent neighborhoods with bicycle and pedestrian networks that are accessible and safe for people of all ages and abilities.

Policy M-1.6: Update signal timing and upgrade signals throughout downtown to reduce the delay and support access for bicyclists, pedestrians, and transit.

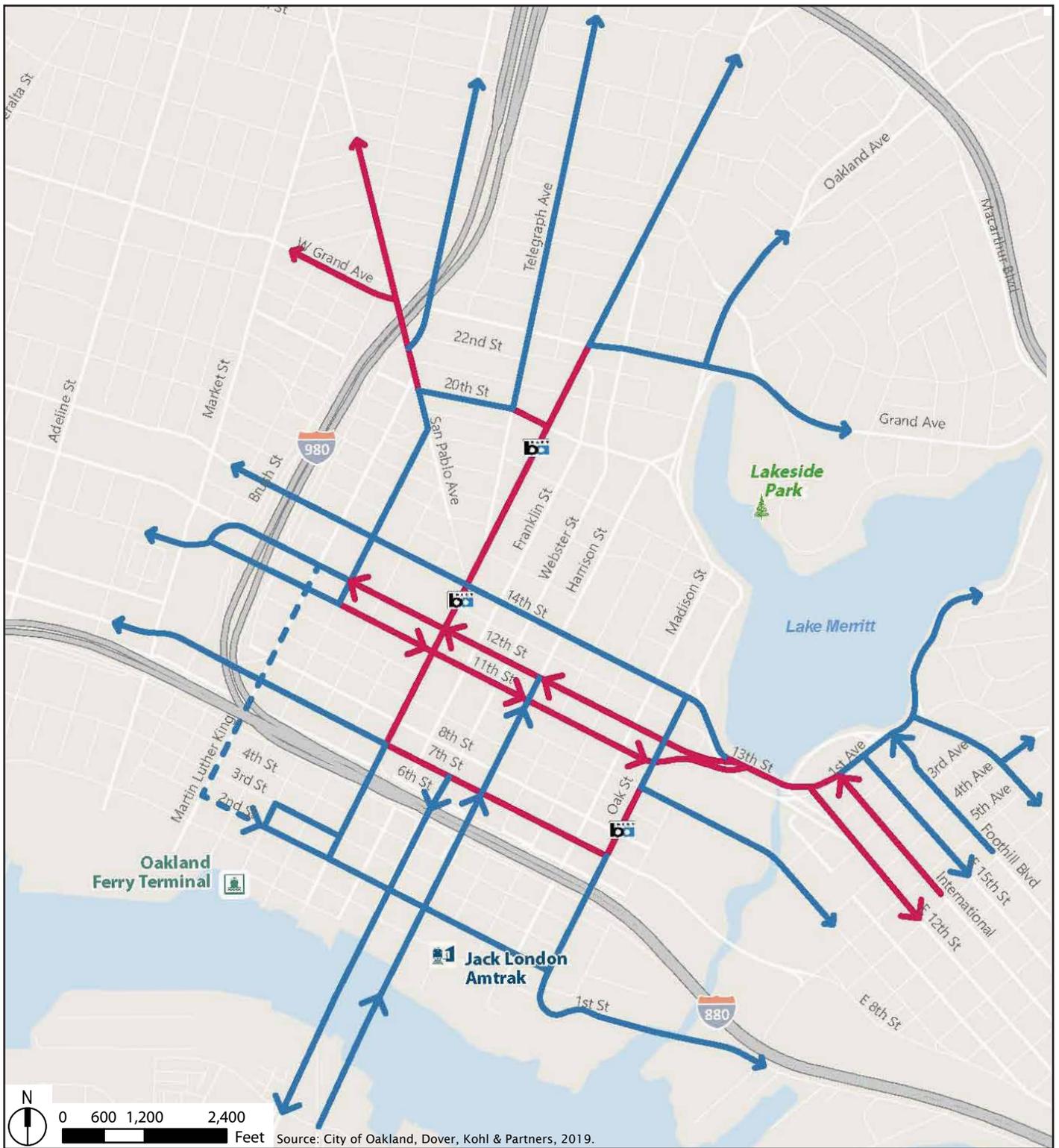
Outcome M-2: Communities that are more transit-dependent are well-served to travel to and from downtown with frequent, reliable, and safe transit service.

Policy M-2.1: Implement transit priority treatments on key downtown corridors and decrease bus headways to improve overall transit travel times, and access to, from and within downtown (as identified in Figure M-7 and described in Appendix table M-6).

Policy M-2.2: Improve passenger amenities (including wayfinding) and security at bus stops on all transit streets throughout downtown. Bus stops can include lighting, new shelters, benches, wayfinding information in multiple languages, and other amenities including those that improve access and comfort for people with disabilities.

Policy M-2.3: Reconfigure transit service in Jack London and Chinatown to better connect with regional transit (Ferry terminal, Amtrak, and Lake Merritt BART) and improve bus transit connections between downtown and East Oakland, as shown in Figure M-9.

Policy M-2.4: Work with transit agencies to offer a low-income transit pass to reduce the cost of transit fare.



Legend

- Downtown Oakland Specific Plan Area
- ba BART Station
- Bus Transit Network
- Bus Priority Treatments
- ← One-Way Operations
- ← Transit Line Continuous
- Bus Transit Network (future)

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Figure V.B-7
Proposed Bus Transit Network

Policy M-2.5: Maintain reliable, ADA-accessible access to transit stations (i.e., BART elevators and escalators) and find opportunities to increase the number of elevators. Address all access needs identified in previous BART planning efforts for the 19th Street Station and 12th Street/City Center Station.

Policy M-2.6: Name transportation facilities to reflect the location or character of the place that they serve.

Policy M-2.7: Preserve enough bus layover capacity around Lafayette Square, Lake Merritt BART, and Jack London District to serve existing and future transit service needs to and from downtown.

Policy M-2.8: Capitalize on potential regional transit expansion opportunities for BART, Capitol Corridor, and ferry service.

Policy M-2.9: Consider locations for a Transbay crossing and new BART Station in downtown. Evaluate locations such as, but not limited to, I-980, Broadway, Franklin, Webster, Clay Street or Washington Street.

Policy M-2.10: Develop a policy requiring downtown employers with more than 50 employees to develop and implement TDM plans and monitor and report on trip reduction.

Policy M-2.11: Continue to implement the recommendations of the 2011 Train Quiet Zone Study that details the specific safety measures for each intersection and provide a blueprint of the Jack London Train Quiet Zone. Extend study area east of Oak Street.

Outcome M-3: Oaklanders connect to Downtown's resources with intermodal and multimodal options that accommodate people of all ages and abilities from their front door to their destination and back.

Policy M-3.1: Implement the City's adopted Complete Streets Policies and focus on reconfiguring road space on public streets with excess capacity to other modes, such as bicycles, pedestrians, and transit and loading/unloading. (Pedestrian improvements are proposed under Policies M-1.4 to M-1.8; bicycle improvements are proposed under Policy M-1.10; and transit improvements are proposed under policies in Outcome M-2. A map of proposed one-way to two-way conversions to achieve these multimodal strategies is illustrated in Figure M-9 and described in Appendix Table M-6.)

Policy M-3.2: Decrease freeway traffic on local streets through improvements proposed as part of the Oakland/Alameda Access Project.

Policy M-3.6: Actively manage curbside space to serve diverse needs of Oakland's residents, merchants, and visitors. Programs to pursue include:

- Implementing the Color Curb Program in Chinatown, or a combined commercial loading/metered parking zones on select streets
- Developing a Curbside Management Study to analyze the uses of curbside space, both auto and non-auto, as well as potential future uses such as automated vehicles, and develop a clear

methodology to guide decision-making on how to manage and prioritize the use of scarce curb space. This study could build upon the 2016 Downtown Oakland Parking Study.

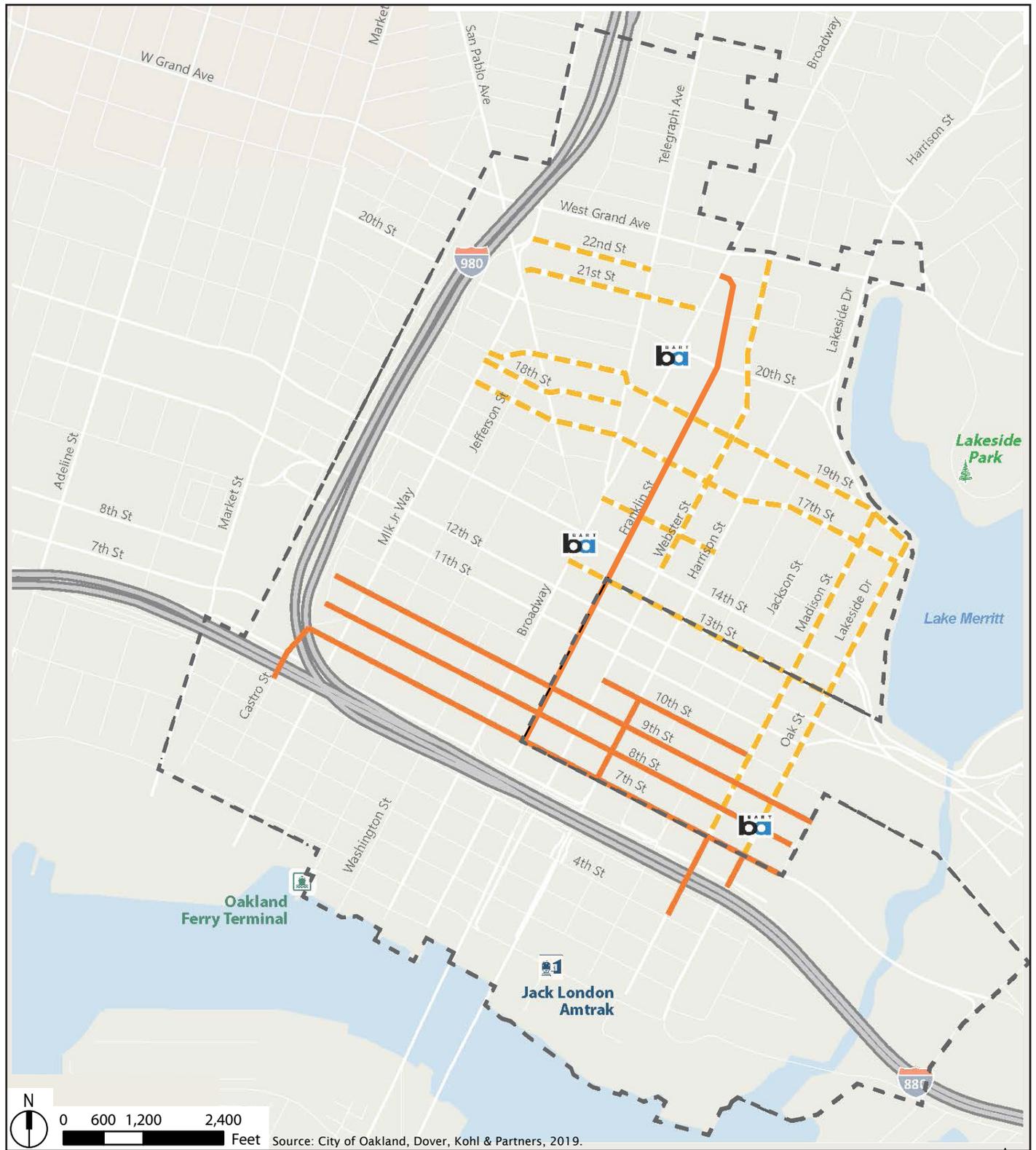
The transit changes noted on the figure in combination with the policies listed above yield a comprehensive set of projects in the Specific Plan (Appendix B, Table M-5). These transit modifications would generally enhance transit travel times and reliability while providing a higher quality of service and an improved rider experience encouraging more people to choose to take transit rather than drive or ride in an automobile. The projects identified in the Specific Plan would be reviewed through the City's Design Review Process to ensure consistency with applicable design standards. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to consistency with adopted transit policies, plans, and programs.

Motor Vehicles

Several of the downtown streets are one-way, which according to the Specific Plan tends to prioritize vehicle movements through downtown rather than neighborhood access and circulation. This is because a motor vehicle driver in a two-way configuration can approach businesses and residences from two directions whereas in a one-way configuration a driver can only approach from one direction. In addition, many downtown streets operate well below the street's vehicle capacity. As a result, the excess capacity can be reconfigured to provide more space for bikes, pedestrians, transit, and commercial activities. Support for converting the one-way streets to two-way streets was prioritized by the community throughout the public process. The Plan's priority street conversions are shown on Figure V.B-8 and include 7th, 8th, 9th, and Franklin streets, which received broad support for conversion from the community. Many other candidate streets were also identified for conversion and are also shown on Figure V.B-8. To complement the street conversions the Specific Plan also identifies motor vehicle improvements (Appendix B Table M-6). The relevant Specific Plan policies supporting the improvements include:

Outcome M-3: Oaklanders connect to Downtown's resources with intermodal and multimodal options that accommodate people of all ages and abilities from their front door to their destination and back.

Policy M-3.1: Implement the City's adopted Complete Streets Policies and focus on reconfiguring road space on public streets with excess capacity to other modes, such as bicycles, pedestrians, and transit, and loading/unloading. (Pedestrian improvements are proposed under Policies M-1.4 to M-1.8; bicycle improvements are proposed under Policy M-1.10; and transit improvements are proposed under policies in Outcome M-2. A map of proposed one-way to two-way conversions to achieve these multimodal strategies is illustrated in Figure M-9 and described in Appendix Table M-6.)



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**Figure V.B-8
Proposed Street Conversions**

Policy M-3.2: Decrease freeway traffic on local streets through improvements proposed as part of the Oakland/Alameda Access Project.

Policy M-3.7: Expand the Park Oakland program to additional areas of Downtown Oakland to manage public parking to balance the diverse needs of Downtown Oakland's visitors, merchants, commuters and residents. Goals include ensuring parking availability; increasing ADA-accessible parking and passenger loading with the objectives of serving the needs of people with disabilities, seniors, and downtown businesses; reducing the number of motorists circulating to find parking; balancing the needs placed on curb space; and better managing parking resources and demand. Actions include:

- Increase ADA-accessible parking and passenger loading with the objectives of serving the needs of people with disabilities, seniors, and businesses.
- Implement real-time parking signage to display parking availability and pricing.
- Adopt the Sensor Independent Rate Adjustment (SIRA) methodology developed for San Francisco's SFpark to monitor parking occupancy in real time.
- Establish parking benefit districts in which a portion of parking revenues are used for improvements in the areas where the funds are collected.
- Give existing merchant and neighborhood organizations, such as Business Improvement Districts and Cultural Districts, a significant advisory role in deciding how to spend their local parking benefit district's revenues.
- Establish a committee, with significant representation from people with disabilities, to propose reforms to (a) improve curb parking availability for people with disabilities, and (b) reduce Disabled Placard fraud and abuse.

Policy M-3.3: Establish parking maximums, include requirements for electric vehicle charging and consider a means by which developers can build parking up to 1.25 spaces per unit in exchange for providing community benefits.

Policy M-3.6: Actively manage curbside space to serve diverse needs of Oakland's residents, merchants, and visitors, and their diverse mobility needs. Programs to pursue include:

- Implementing the Color Curb Program in Chinatown, or a combined commercial loading/metered parking zones on select streets.
- Developing a Curbside Management Study to analyze the uses of curbside space, both auto and non-auto, as well as potential future uses such as automated vehicles, and develop a clear methodology to guide decision-making on how to manage and prioritize the use of scarce curb space. This study could build upon the 2016 Downtown Oakland Parking Study.

Policy M-3.5: Study the long-term feasibility of replacing I-980 with a multi-way boulevard to better connect West Oakland and downtown, creating opportunities for new housing and other uses, and support walking, biking, and transit.

Policy M-3.4: Prioritize the movement of emergency service vehicles throughout downtown by 1) allowing emergency service vehicles to use proposed dedicated transit lanes; and 2) up-grade signal technology to provide emergency pre-emption throughout downtown.

Policy M-3.9: Maintain truck routes to, from, and within the Jack London to facilitate safe and efficient goods movement from industrial and warehousing facilities. Development a truck management plan for the larger Downtown Oakland area.

Policy M-3.10: Adopt stronger regulations to ensure safe access for pedestrians, bicyclists, and transit riders of all abilities during construction projects Downtown.

Through the Specific Plan process, several key corridors with competing mobility needs and modal priorities were determined based on a complete street process (addressing safety, access, and community input) including: 7th, 8th, and 9th streets between Fallon and Castro streets (see image 1, 2, and 3, respectively), Franklin Street (6th Street to Broadway) and Webster Street (north of 14th Street) (see image 4 and 5 respectively); and Oak streets between 2nd and 14th streets (see image 6). These street changes are conceptual and were considered in the street segment capacity evaluation conducted for the Specific Plan. The final plans would be established through a public planning process. Cross sections are representative of the type of potential improvements. Traffic analysis and design details for each corridor will be evaluated on a project by project basis.

The street modifications impacting vehicles would generally enhance transit travel times and reliability i.e., providing bus-only lanes on Broadway and 7th Street while providing a higher quality of service and an improved rider experience encouraging more people to choose to take transit rather than drive or ride in an automobile. The street modifications impacting vehicles would also enhance the all ages and abilities bicycle network attracting more people to bicycling and improving bicycle comfort and safety.

The projects identified in the Specific Plan would be reviewed through the City's Design Review Process to ensure consistency with applicable design standards. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to consistency with adopted motor vehicle policies, plans, and programs.



Image 1 – 7th Street



Image 2 – 8th Street



Image 3 – 9th Street



Image 4 – Franklin Street



Image 5 – Webster Street



Image 6 – Oak Street

Impact TRANS-1: The bus-only lanes proposed in the Specific Plan may overlap with the Specific Plan’s proposed low stress bike network, potentially generating transportation conflicts between bicycle and transit along corridors where both are proposed. (S)

Specific Plan Policy M-3.1 implements the City’s adopted Complete Streets Policies with a focus on reconfiguring public streets with excess capacity to other modes such as bicycles, pedestrians, and transit. To implement this policy there are pedestrian improvements under Policies M-1.1 through M-1.3; bicycle improvements under Policy M-1.10; and transit improvements under policies in Outcome M-2. While the LUTE has a policy for resolving transportation conflicts (Policy T3.7) between transit and single-occupant vehicles, there is not a similar policy in either the Specific Plan or the LUTE to resolve conflicts between transit and bikes. The bus-only transit lanes proposed under the Specific Plan would require converting existing vehicle lanes to bus-only lanes. Bike lanes and the low stress bike network proposed as part of the Specific Plan would also be achieved by eliminating one or more vehicle lanes. The Specific Plan’s proposed bus-only lanes may overlap with the Specific Plan’s proposed low stress bike network, potentially generating transportation conflicts on:

- San Pablo Avenue, north of 20th Street.
- West Grand Avenue, west of San Pablo Avenue into West Oakland.
- Lake Merritt Boulevard between 12th Street and International Boulevard.

These potential conflicts, bike facilities versus transit facilities, can be resolved through collaboration with AC Transit on corridor-specific studies of the multi-modal trade-offs. The City is currently collaborating with AC Transit and others on multi-modal studies for the following corridors:

- San Pablo Avenue corridor (underway and being led by Alameda CTC).
- Grand Avenue between Mandela Parkway and MacArthur Boulevard (underway and being led by the City of Oakland).

A corridor-specific multimodal study has not yet been identified for Lakeshore Boulevard between 12th Street and International Boulevard where East Bay BRT will operate at 7-minute headways all day on both weekdays and weekends. Therefore, Mitigation Measure TRANS-1 is identified:

Mitigation Measure TRANS-1: The Specific Plan shall include an implementation measure that requires the City of Oakland as part of the planning and design process for bicycle or transit improvements to collaborate with AC Transit and other stakeholders to address multimodal impacts on streets and corridors where both low stress bike facilities and bus-only lanes are being considered. The Plan shall establish the prioritized transportation modes; consider the corridor’s physical characteristics and expected land use; incorporate input from the community; evaluate multi-modal safety, travel markets, transportation and

land use compatibility, and stakeholder inputs; and identify the design features that support the prioritized transportation modes prior to beginning final design. (LTS)

After implementation of this measure the modal priority and design elements will be established for corridors where both bicycle and transit infrastructure are planned. Once resolved, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to conflicts between bicycle and transit along corridors where both are proposed.

Impact TRANS-2: Development under the Specific Plan would generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard. (SU)

Specific Plan Policy M-1.9 links neighborhoods with the waterfront. The Specific Plan recognizes the opportunities for recreational activities by connecting Lake Merritt, Lake Merritt Channel, and the Estuary and the importance of safe and direct connections of these areas with neighborhoods. To accomplish this the Specific Plan envisions a "Green Loop" as a circulation concept linking these waterfronts and downtown as well as expanding the loop concept to include West Oakland. Direct links between the waterfront and downtown mean crossing the at-grade railroad tracks that run through Jack London District within the Embarcadero West multi-modal corridor. The Specific Plan identifies Embarcadero West as part of the high injury network for vulnerable users i.e., pedestrians and bicyclists. This corridor also services passenger and freight rail as well as motor vehicle traffic. The Specific Plan does not identify policies directed at addressing the rail crossing safety as part of the "Green Loop." The 2019 Let's Bike Oakland Plan includes bike infrastructure that aligns with the "Green Loop" route and does not identify policies pertaining to the rail crossing safety; nor does the 2017 Pedestrian Master Plan.

UPRR owns and operates the two mainline railroad tracks through the Jack London District which is part of the Specific Plan. In addition to the "Green Loop" which would attract bicycle and pedestrian activities to the waterfront, substantial residential and commercial development is contemplated in the Specific Plan which would be expected to generate multi-modal demand for services on both sides of the railroad tracks, recreational demand for water-related activities and the Bay Trail which crosses the railroad tracks at Clay Street, as well as additional demand for Ferry service. Introducing additional multi-modal traffic at the existing at-grade railroad crossings therefore potentially contributes to safety issues along the railroad corridor through Jack London District both at at-grade crossings and between crossings.

Mitigation Measure TRANS-2: The Specific Plan shall include an implementation measure that requires the City of Oakland within the near-term (1 to 5 years) to undertake and complete a Diagnostic Study as outlined in SCA-TRANS-7: Railroad Crossing (#82) to identify

and implement the suite of improvements to enhance multi-modal safety along the railroad tracks including the elements necessary for a Quiet Zone through Jack London District. The study shall identify the schedule and potential funding for implementing the suite of improvements resulting from the study and the City as the lead agency would design and construct the improvements. Any proposed improvements must be coordinated with California Public Utility Commission (CPUC) and affected railroads and all necessary permits/approvals obtained, including a GO 88-B Request (Authorization to Alter Highway Rail Crossings). **(SU)**

Given funding for the Diagnostic Study has not yet been identified and the implementation of any resulting recommendations would likely require approval by agencies outside of the City of Oakland (CPUC or UPRR), this impact is conservatively deemed significant and unavoidable under CEQA Criterion #2.

(3) Street Capacity (Criterion 3)

As part of implementation of the Specific Plan, vehicle lanes on Broadway between Grand Avenue and 7th Street, 7th Street between Broadway and Oak Street, and Oak Street between 7th Street and 10th Street are planned to be converted to bus-only lanes to improve bus transit reliability. Vehicle lanes on Martin Luther King Junior Way, 20th Street, and 14th Street would be converted to bike facilities to implement the low stress bicycle network contemplated in the Specific Plan. The Specific Plan does not propose any new streets or modifications to existing streets that would induce additional automobile travel by increasing physical street capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new streets to the downtown network. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to street capacity.

(4) Impacts to the Regional CMP Roadway Segments (Criterion 4)

As described above, the Alameda County CMP requires the assessment of development-driven impacts to regional roadways. The CMP and MTS roadways in the vicinity of the Plan Area include I-580, I-980, I-880, SR 24, Grand Avenue, Broadway, San Pablo Avenue, Telegraph Avenue, Harrison Street, Webster Street, Martin Luther King Junior Way, Castro Street, Brush Street, Market Street, Middle Harbor Road, 14th Street, 12th Street, 11th Street, 8th Street, and 7th Street.

The Alameda CTC Model used in this study is a regional travel demand model that uses socio-economic data and roadway and transit network assumptions to forecast traffic volumes and transit ridership using a four-step modeling process that includes trip generation, trip distribution, mode split, and trip assignment. This process considers changes in travel patterns

due to future growth and balances trip productions and attractions. This version of the Countywide Model is dated May 2018 and reflects land use forecasts from Plan Bay Area 2040.

For the purposes of this CMP and MTS analysis, development under the Specific Plan is assumed to not be included in the Alameda CTC Model to present a more conservative analysis. The traffic forecasts for the 2020 and 2040 scenarios were extracted from the Alameda CTC Model for the CMP and MTS roadway segments from that model and used as the “No Project” forecasts. Vehicle trips generated by the Plan development was added to the “No Project” forecasts to estimate the “Plus Project” forecasts.

Consistent with past EIR documents for development in Oakland the CMP and MTS segments were assessed using a V/C ratio methodology. For freeway segments, a per-lane capacity of 2,000 vehicles per hour (vph) was used, consistent with the latest CMP documents. For surface streets, a per-lane capacity of 800 vph was used. Roadway segments with a V/C ratio greater than 1.00 signify LOS F.

Impact TRANS-3: The development under the Specific Plan would contribute to the significant degradation of several CMP or MTS segments in 2020. (SU)

- I-580 in the eastbound direction between I-80/I-580 and I-980 and between Oakland Avenue and Grand Avenue.
- I-880 in the northbound direction between 42nd Avenue and 29th Avenue and between 23rd Avenue and Embarcadero.
- I-880 in the southbound direction between Embarcadero and 42nd Avenue.
- SR 24 in the eastbound direction between Claremont Avenue and Broadway and between State Route 13 and Contra Costa County.
- Webster Tube in the westbound direction between the City of Oakland and the City of Alameda.
- Posey Tube in the eastbound direction between the City of Alameda and the City of Oakland.
- Telegraph Avenue in the northbound direction between Grand Avenue and 27th Street.

The “2020 + Project” scenario results were compared to the baseline results for the 2020. Appendix C provides the peak-hour volumes, V/C ratios and the corresponding levels of service for without Specific Plan development and a plus Specific Plan development conditions.

As previously described, the Specific Plan includes policies and strategies that encourage walking, biking and transit, including a TDM program. These policies and strategies would reduce the Specific Plan’s development vehicle trip generation, which would significantly reduce the magnitude of this impact. However, given the effectiveness of these policies and strategies on

reducing the vehicle trip generation cannot be accurately estimated, the trip generation estimates for development that is likely to occur under the Specific Plan are not discounted to account for reductions that would likely result from implementation of the proposed TDM measures.

Mitigation Measure TRANS-3: No other feasible mitigation measures, beyond TDM measures, are available to reduce the effect development under the Specific Plan would have on the adversely affected roadway segments. **(SU)**

The LOS at these roadway segments could be improved by providing additional automobile travel lanes on the affected roadway segments; however, additional travel lanes cannot be accommodated within the existing automobile right-of-way and would require additional right-of-way, and/or loss of Plan-proposed bicycle lanes, bus-only lanes, and sidewalk enhancements; or the removal of medians and/or on-street parking. As a result, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be significant and unavoidable related to motor vehicle LOS with no feasible mitigation possible.

d. Cumulative Impacts

This section measures the Specific Plan against the significance criteria under cumulative conditions in 2040 and establishes whether the Plan would result in any cumulative traffic or transportation impacts.

(1) Vehicle Miles Travelled (Criterion 1)

Table V.B-6 shows the Specific Plan's 2040 VMT for commercial and residential uses. As shown, per capita VMT in 2040 for the Plan will be 4.8 compared to the regional average of 13.8. The per worker Specific Plan VMT will be 13.3 compared to the regional average of 20.3. Under both conditions, Plan-generated VMT would be more than 15% below the regional averages in 2040 and constitute a less-than-significant impact.

Table V.B.-7 shows the Specific Plan 2040 regional serving retail VMT in terms of citywide service population. As shown in the table, VMT per citywide service population would remain the same without and with the regional serving retail component of the Specific Plan which would be less than significant for the regional serving retail component of the Plan in 2040.

(2) Consistency with Adopted Policies, Plans, or Programs (Criterion 2)

The Specific Plan and the associated SCAs presented in this Draft EIR were discussed in detail in the previous sections. Implementation of the Specific Plan and its associated development when considered together with cumulative development results in a significant cumulative impact

related to safety. The cumulative development includes the Specific Plan and development under the Lake Merritt Station Area Plan, West Oakland Specific Plan, and the Broadway Valdez District Specific Plan, as well as the Howard Terminal Development.

Cumulative Impact TRANS-1: Development under the Specific Plan together with cumulative development, would generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard. (SU)

Impact TRANS-2 above notes that the Specific Plan policies would generate additional multimodal traffic traveling across the at-grade railroad crossings in Jack London District exposing users to a permanent or substantial transportation hazard. Specific Plan Policy M-1.5 calls for linking the downtown neighborhoods with the waterfront including the Estuary which requires people to cross the railroad tracks through Jack London District. UPP owns and operates the railroad and the California Public Utilities Commission has jurisdiction over the at-grade railroad crossings. Buildout of the Specific Plan and associated policies and projects does not necessarily resolve this impact because the City does not have jurisdiction over the at-grade crossings and cannot ensure at-grade crossing improvements are constructed.

Cumulative Mitigation Measure TRANS-1: Implement Impact TRANS-2. (SU)

(3) Street Capacity (Criterion 3)

The Specific Plan does not propose any new streets under cumulative conditions in 2040. Nor does the proposed Plan modify existing streets that would induce additional automobile travel by increasing physical street capacity in congested areas (i.e., by adding new mixed-flow lanes) or by adding new streets to the network. As a result, the implementation of the Specific Plan would not cause a significant cumulative impact on street capacity.

(4) Impacts to the Regional CMP Roadway Segments (Criterion 4)

Cumulative Impact TRANS-2: The development under the Specific Plan would degrade from LOS E or better to LOS F or increase the v/c ratio by 0.03 or more for segments at LOS F on the following CMP or MTS segments in 2040. (SU)

- I-580 in the eastbound direction between I-80/I-580 and I-980 and Oakland Avenue and MacArthur Boulevard.
- I-580 in the westbound direction between Fruitvale Avenue Lakeshore Avenue and between Grand Avenue and Oakland Avenue.
- I-980 in the eastbound direction between 12th Street and 27th Street.

- I-880 in the northbound direction between 42nd Avenue and Oak Street and between Union Street and 7th Street.
- I-880 in the southbound direction between 7th Street and Union Street and between Oak Street and 42nd Avenue.
- SR 24 in the eastbound direction between I-580 and Contra Costa County.
- Webster Tube in the westbound direction between the City of Oakland and the City of Alameda.
- Posey Tube in the eastbound direction between the City of Alameda and the City of Oakland.
- West Grand Avenue in the eastbound direction between I-880 and San Pablo Avenue.
- West Grand Avenue in the westbound direction between Broadway and Telegraph Avenue.
- Broadway in the northbound direction between College Avenue and SR 24.
- Broadway in the southbound direction between 40th Street and 27th Street.
- Telegraph Avenue in the northbound direction between Grand Avenue and 27th Street.
- Telegraph Avenue in the southbound direction between 29th Street and 27th Street.
- San Pablo Avenue in the northbound direction between Castro Street and Powell Street.
- San Pablo Avenue in the southbound direction between Powell Street and 20th Street.
- Harrison Street in the northbound direction between 27th Street and Oakland Avenue.
- Castro Street in the northbound direction between 8th and 12th streets and between 14th Street and San Pablo Avenue.
- 12th Street in the westbound direction between Broadway and Castro Street.
- East 8th Street in the eastbound direction between 5th Avenue and 14th Avenue.
- 7th Street in the eastbound direction between Oak Street and 5th Avenue.

The “Plus Project” results were compared to the baseline results for the 2040 horizon year. Appendix F provides the 2040 peak-hour volumes, V/C ratios and the corresponding levels of service for no Specific Plan development and plus Plan development conditions.

As previously described, the Specific Plan includes policies and strategies that encourage walking, biking and transit, including a TDM program. These policies and strategies would reduce the Specific Plan’s development vehicle trip generation, which would reduce the magnitude of this impact. Because the effectiveness of these policies and strategies on reducing the vehicle trip generation cannot be accurately estimated, this Draft EIR conservatively does not account for

them in estimating Specific Plan trip generation and does not rely on them to mitigate this impact.

Cumulative Mitigation Measure TRANS-2: No other feasible mitigation measures, beyond TDM measures, are available to reduce the effect development under the Specific Plan would have on the adversely affected roadway segments. **(SU)**

The LOS at these roadway segments can be improved by providing additional automobile travel lanes on the affected roadway segments. However, additional travel lanes cannot be accommodated within the existing automobile right-of-way and would require additional right-of-way, and/or loss of Plan-proposed bicycle lanes, bus-only lanes, and sidewalk enhancements; or the removal of medians and/or on-street parking. Therefore, the impact related to LOS would remain significant and unavoidable and no motor vehicle mitigation measures would be feasible.

C. AIR QUALITY

This section describes the current air quality conditions in the Plan Area and its vicinity, including Chinatown, which is primarily within the Lake Merritt Station Plan Area but surrounded on three sides by the Plan Area as shown in Figure III-2 in *Chapter III, Project Description*. The analysis considers how implementation of the Downtown Oakland Specific Plan and its associated development may adversely affect these conditions. The potential impacts assessed include increases in criteria air pollutant and toxic air contaminant (TAC) emissions that could result from development under of the Specific Plan. The analysis in this section was prepared in accordance with the Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines (CEQA Guidelines).¹ Specific Plan, existing City policies, and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified.

1. Setting

The Downtown Oakland Specific Plan Area (Plan Area) is located within the San Francisco Bay Area Air Basin (SFBAAB). Some air basins have natural characteristics that limit the ability of natural processes to either dilute or transport air pollutants. The major determinants of air pollution transport and dilution are climatic and topographic factors such as wind, atmospheric stability, terrain that influences air movement, and sunshine. Wind and terrain can combine to transport pollutants away from upwind areas, while solar energy can chemically transform pollutants in the air to create secondary photochemical pollutants such as ozone. The following discussion provides an overview of the environmental setting with regard to air quality in the SFBAAB.

a. Regional Climate, Meteorology, and Topography

The San Francisco Bay Area (Bay Area) has a Mediterranean climate characterized by wet winters and dry summers. During the summer, a high-pressure cell centered over the northeastern Pacific Ocean results in stable meteorological conditions and a steady northwesterly wind flow that generally keeps storms from affecting the California coast. During the winter, the Pacific high-pressure cell weakens, resulting in increased precipitation and the occurrence of storms. The highest air pollutant concentrations in the Bay Area generally occur during inversions, when a surface layer of cooler air becomes trapped beneath a layer of warmer air. An inversion reduces the amount of vertical mixing and dilution of air pollutants in the cooler air near the surface.

Oakland is within a climatological subregion that stretches from Richmond to San Leandro. The western boundary of this subregion is defined by the San Francisco Bay and the eastern boundary

¹ Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, May.

by the Oakland-Berkeley Hills. The Oakland-Berkeley Hills have a ridge-line height of approximately 1,500 feet, which creates a significant barrier to air flow in the Bay Area. The prevailing wind direction is from the west.² Average summer temperatures range from about 55 to 75 degrees Fahrenheit (°F), and average winter temperatures range from about 45 to 55 °F.

b. Air Pollutants of Concern

The California Air Resources Board (CARB) and United States Environmental Protection Agency (EPA) focus on the following air pollutants as regional indicators of ambient air quality:

- Ozone
- Suspended particulate matter—both respirable (PM₁₀) and fine (PM_{2.5})
- Nitrogen dioxide (NO₂)
- Carbon monoxide (CO)
- Sulfur dioxide (SO₂)
- Lead

Because these are the most prevalent air pollutants known to be harmful to human health, based on extensive criteria documents, they are referred to as “criteria air pollutants.” In the SFBAAB, the primary criteria air pollutants of concern are ground-level ozone formed through reactions of oxides of nitrogen (NO_x) and reactive organic gases (ROG), PM₁₀, and PM_{2.5}. The BAAQMD operates a network of air monitoring stations throughout the SFBAAB to monitor air pollutants such as ozone, PM₁₀, and PM_{2.5}. Table V.C-1 presents a five-year summary for the period 2013 to 2017 of the highest annual concentrations of ozone and PM_{2.5}, which is collected at the Oakland West monitoring station located at 1100 21st Street in Oakland and is the closest monitoring station to the Plan Area. The nearest station where PM₁₀ levels are measured is the Concord monitoring station at 2975 Treat Boulevard in Concord. Table V.C-1 also compares measured pollutant concentrations with applicable State and federal ambient air quality standards, which are discussed further under Section V.C.2.a.

In addition to criteria air pollutants, local emissions of Toxic Air Contaminants (TAC)s, such as diesel particulate matter (DPM), are a concern for nearby receptors. These primary air pollutants of concern are discussed further below.

(1) Ozone

While ozone serves a beneficial purpose in the upper atmosphere (stratosphere) by reducing ultraviolet radiation, it can be harmful to the human respiratory system and to sensitive species of plants when it reaches elevated concentrations in the lower atmosphere. Ozone is not emitted

² Bay Area Air Quality Management District (BAAQMD), 2000. BAAQMD Meteorological Data; Oakland STP, Station No. 1804.

TABLE V.C-1 MAXIMUM AIR POLLUTANT CONCENTRATIONS

Pollutant	Standard	2013	2014	2015	2016	2017
Ozone (O ₃)	Max 1-hour Concentration (ppm)	0.071	0.072	0.091	0.065	0.087
	Days > CAAQS (0.09 ppm)	0	0	0	0	0
	Max 8-hour Concentration (ppm)	0.06	0.0528	0.065	0.053	0.069
	Days > CAAQS (0.070 ppm)	0	0	0	0	0
	Days > NAAQS (0.070 ppm)	0	0	0	0	0
Particulate Matter (PM ₁₀)	Max 24-hour Concentration (µg/m ³)	50.5	42.5	24	19	41.2
	Days > CAAQS (50 µg/m ³)	NV	0	0	0	NV
	Days > NAAQS (150 µg/m ³)	0	0	0	0	NV
	Annual Arithmetic Mean (µg/m ³)	8.3	14.1	13.1	11.5	6.5
Particulate Matter (PM _{2.5})	Max 24-hour Concentration (µg/m ³)	42.7	38.8	38.7	23.9	56
	Days > NAAQS (35 µg/m ³)	3	1	4	0	8
	Annual Arithmetic Mean (µg/m ³)	12.8	9.5	10.2	8.7	12.9

Notes: CAAQS = California ambient air quality standards; µg/m³ = micrograms per cubic meter; NAAQS = National ambient air quality standards; ppm = parts per million; NV = no value due to insufficient data.

State statistics are based on California-approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers. When the measured state and national concentrations varied due to different sample methods, the highest concentration was reported in the summary table.

Source: CARB 2019. iADAM: Air Quality Data Statistics; Trend Summaries. Available at: <https://www.arb.ca.gov/adam/trends/trends1.php>, accessed April 10, 2019.

directly into the environment, but is formed in the atmosphere by complex chemical reactions between ROG and NO_x in the presence of sunlight. Ozone formation is greatest during periods of little or no wind, bright sunshine, and high temperatures. As a result, levels of ozone usually build up during the day and peak in the afternoon.

Sources of ROG and NO_x are vehicle tailpipe emissions; evaporation of solvents, paints, and fuels; and biogenic emissions.³ Automobiles are the single largest source of ozone precursors in the SFBAAB. Short-term ozone exposure can reduce lung function in children, exacerbate respiratory infections, and produce symptoms of respiratory distress. Long-term exposure can impair lung defense mechanisms and lead to emphysema and chronic bronchitis. Ozone can also damage plants and trees and materials such as rubber and fabrics.

³ Biogenic sources include volatile organic compounds, which include ROG, from the decomposition of vegetative matter and certain plants, such as oak and pine trees.

(2) Particulate Matter

PM₁₀ and PM_{2.5} consist of extremely small, suspended particles or droplets that are 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, like pollen, forest fires, and windblown dust, are naturally occurring. In populated areas, however, most particulate matter is caused by road dust, combustion products, abrasion of tires and brakes, and construction activities. Particulate matter can also be formed in the atmosphere by condensation of SO₂ and ROG.

Particulate matter exposure can affect breathing, aggravate existing respiratory and cardiovascular disease, alter the body's defense systems against foreign materials, and damage lung tissue, contributing to cancer and premature death. Individuals with chronic obstructive pulmonary or cardiovascular disease, asthmatics, the elderly, and children are most sensitive to the effects of particulate matter.

(3) Toxic Air Contaminants (TACs)

TACs include a diverse group of air pollutants that can adversely affect human health. Unlike criteria air pollutants, which generally affect regional air quality, TAC emissions are evaluated based on estimations of localized concentrations and risk assessments. The adverse health effects a person may experience following exposure to any chemical depend on several factors, including the amount (dose), duration, chemical form, and any simultaneous exposure to other chemicals.

For risk assessment purposes, TACs are separated into carcinogens and non-carcinogens. Carcinogens are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per 1 million exposed individuals over a lifetime of exposure. Non-carcinogenic substances are generally assumed to have a safe threshold below which health impacts would not occur. Acute and chronic exposure to non-carcinogens is expressed as a hazard index (HI), which is the sum of expected exposure levels divided by the corresponding acceptable exposure levels. In the SFBAAB, adverse air quality impacts on public health from TACs are predominantly from DPM.

DPM and PM_{2.5} from diesel-powered engines are a complex mixture of soot, ash particulates, metallic abrasion particles, volatile organic compounds, and other components that can contribute to a range of health problems. In 1998, the CARB identified DPM from diesel-powered engines as a TAC based on its potential to cause cancer and other adverse health effects.⁴ While diesel exhaust is a complex mixture that includes hundreds of individual constituents, under

⁴ California Air Resources Board (CARB), 1998. Initial Statement of Reasons for Rulemaking; Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, June.

California regulatory guidelines, DPM is used as a surrogate measure of exposure for the mixture of chemicals that make up diesel exhaust as a whole. More than 90 percent of DPM is less than 1 micron in diameter, and thus is a subset of PM_{2.5}.⁵ The estimated cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other TAC routinely measured in the region.

c. Existing Sources and Levels of Local Air Pollution

In the Bay Area, stationary and mobile sources are the primary contributors of TACs and PM_{2.5} emissions to local air pollution. According to the BAAQMD's 2017 inventory of permitted stationary sources for TAC and PM_{2.5} emissions,⁶ there are approximately 110 existing stationary sources located within or adjacent to the Plan Area that could cumulatively contribute to local levels of elevated air pollution. These permitted stationary sources are primarily standby generators, boilers, gasoline stations, and other facilities such as auto body shops. Mobile sources of TACs and PM_{2.5} in the Plan Area include (but are not limited to) freeways, major roadways, and ferry terminals.

In an effort to promote healthy infill development from an air quality perspective, the BAAQMD has prepared guidance entitled *Planning Healthy Places*.⁷ The purpose of this guidance document is to encourage local governments to address and minimize potential local air pollution issues early in the land-use planning process, and to provide technical tools to assist them in doing so. Based on a screening-level cumulative analysis of mobile and stationary sources in the Bay Area, the BAAQMD mapped localized areas of elevated air pollution that exceed an excess cancer risk of 100 in a million or PM_{2.5} concentrations of 0.8 micrograms per cubic meter, or are within 500 feet of a freeway, 175 feet of a major roadway (>30,000 annual average daily vehicle trips), or 500 feet of a ferry terminal. Within these localized areas of elevated air pollution, the BAAQMD encourages local governments to implement best practices to reduce exposure to and emissions from local sources of air pollutants. As shown by the purple areas in Figure V.C-1, elevated levels of PM_{2.5} and/or TAC pollution currently extend across most of the Plan Area.

Other sources contributing to local air pollution in the Plan Area include the maritime, truck, and locomotive activities at the Port of Oakland (Port) located west of the Plan Area. The BAAQMD does not have screening tools to evaluate existing TAC and PM_{2.5} emissions from the Port. However, in 2005 CARB conducted a detailed health risk assessment for the West Oakland

⁵ California Air Resources Board (CARB), 2016. Overview: Diesel Exhaust and Health. Last updated April 12, 2016. Available at: <https://www.arb.ca.gov/research/diesel/diesel-health.htm>, accessed January 13, 2017.

⁶ Bay Area Air Quality Management District (BAAQMD), 2019. CSV file for 2017 permitted stationary sources provided by Areana Flores, BAAQMD, to Patrick Sutton, Baseline Environmental Consulting, March 25.

⁷ Bay Area Air Quality Management District (BAAQMD), 2016. *Planning Healthy Places; A Guidebook for Addressing Local Sources of Air Pollutants in Community Planning*, May.

community that evaluated health effects from local emissions of DPM. The sources of DPM emissions evaluated by CARB included maritime activities at the Port, such as ocean-going vessels, commercial harbor craft, cargo-handling equipment, locomotives operating on Port property, and drayage trucks operating on Port property, in West Oakland, and on local freeways.

In 2005, the average excess cancer risk within the Plan Area from DPM emissions associated with Port activities ranged from about 125 to 200 in a million.⁸ In March 2008, the Port's Board of Port Commissioners approved a Maritime Air Quality Policy Statement that sets a goal of reducing the average excess cancer risk in West Oakland from DPM emissions associated with the Port's maritime operations by 85 percent from 2005 to 2020. Based on the Port's 2017 Seaport Emissions Inventory, DPM emissions at the Port have decreased by 81 percent since 2005 and are projected to meet the 85 percent reduction goal in 2020.⁹ Based on the Port's 2020 projection, the current excess cancer risk in the Plan Area from Port maritime activities ranges from about 20 to 30 cases in a million. As shown by the blue areas in Figure V.C-1, the BAAQMD recommends further study to assess local health risks from air pollution for future developments located near the Port. The BAAQMD also recommends additional studies for future developments located adjacent to existing gas stations.

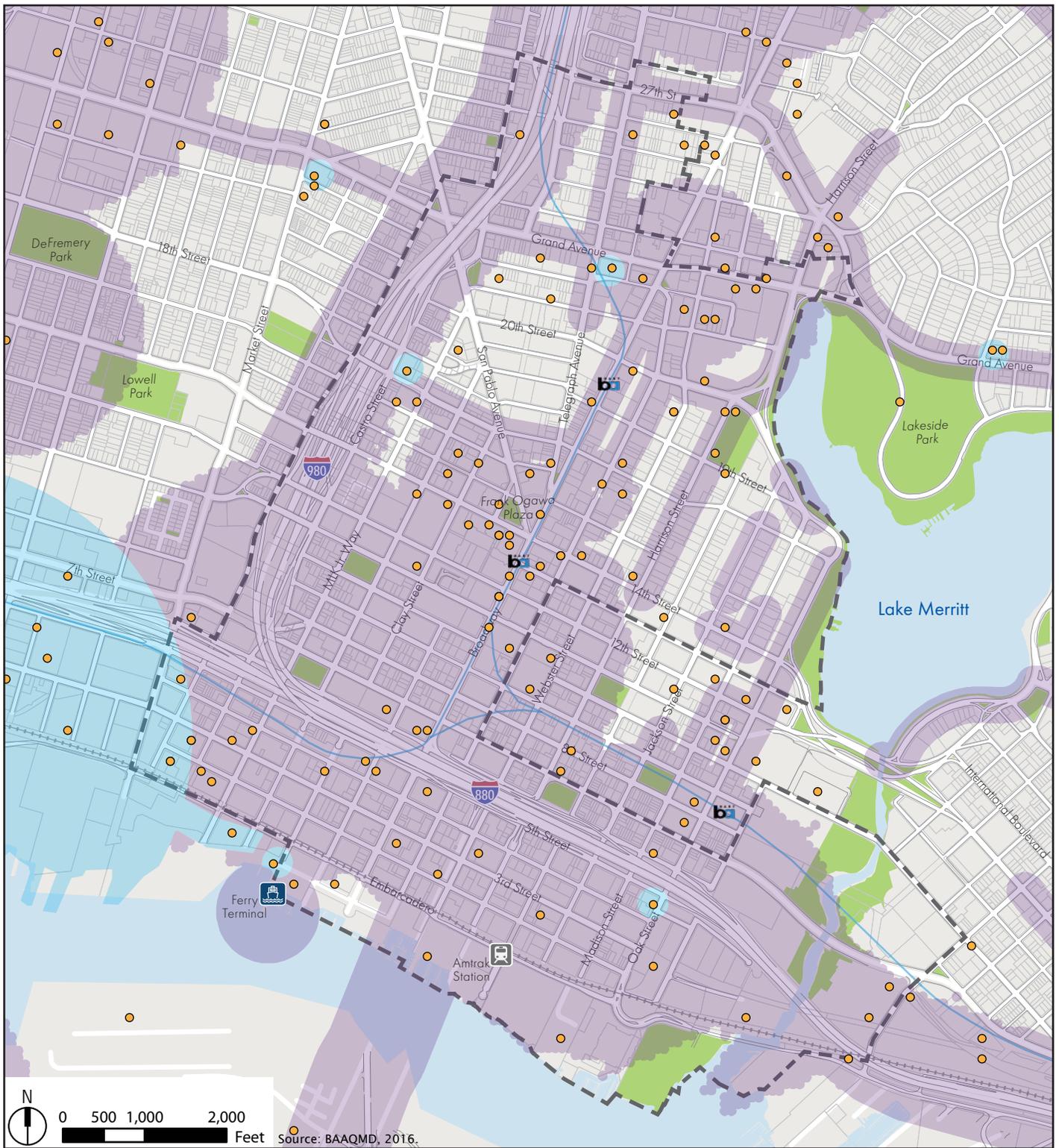
d. Existing Sensitive Receptors

The term "sensitive receptor" refers to a location where individuals are more susceptible to poor air quality. Sensitive receptors include schools, convalescent homes, and hospitals because the very young, the old, and the infirm are more susceptible to air-quality-related health problems relative to other members of the public. Residential areas are also considered sensitive to poor air quality because people are often at home for extended periods, thereby increasing the duration of exposure to potential air contaminants. The current land uses within the Plan Area are described in *Section V.A, Land Use and Planning*, and are shown in Figure V.A-1. Each type of existing air quality-sensitive receptor within the Plan Area are discussed below.

Residences are generally located in Uptown, Koreatown/Northgate (KONO), West of San Pablo, Lakeside, Old Oakland, and Jack London. Locations for residences and open space are shown in Figure V.A-1 of *Section V.A, Land Use and Planning*.

⁸ California Air Resources Board (CARB), 2008. Diesel Particulate Matter Health Risk Assessment for the West Oakland Community, December.

⁹ Port of Oakland, 2018. Revised Draft Seaport Air Quality 2020 and Beyond Plan, December 14.



- Legend**
- Downtown Plan Boundary
 - Stationary Sources
 - Areas of Elevated PM_{2.5} and TAC Concentrations
 - b BART Station
 - Recommended Further Study Areas
 - BART Line
 - Railroad
 - Parks

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Figure V.C-1
Localized Areas of Elevated Air Pollution in the Plan Area

The following schools are located within the Plan Area:

- Oakland School for the Arts (530 18th Street)
- Envision Academy for Arts & Technology (1515 Webster Street)
- Smalltrans Depot Daycare (111 Grand Avenue)
- Little Stars Preschool (169 14th Street)
- New Day Preschool and Learning Center (460 West Grand Avenue)
- Starlight Child Development Center (246 14th Street)
- Laney Children’s Center (286 East 10th Street)
- Bright Future Early Learning (1515 Clay Street)
- Laney College (900 Fallon Street)

The only senior care facility within the Plan Area is the Home Instead Senior Care, located at 505 14th Street Suite 900. There are no hospitals within the Plan Area. The closest hospital is Alta Bates Summit Medical Center, located at 350 Hawthorne Avenue, to the north of the Plan Area.

e. Odors

Other air quality issues of concern in the SFBAAB include nuisance impacts from odors; objectionable odors may be associated with a variety of pollutants. According to the BAAQMD, the following odor sources are of particular concern: wastewater treatment plants, oil refineries, asphalt plants, chemical manufacturing, painting/coating operations, coffee roasters, food processing facilities, recycling operations and metal smelters. All of these odor sources are present within the City of Oakland.¹⁰

2. Regulatory Setting

a. Federal, State, and Regional Regulations

The EPA is responsible for implementing the programs established under the federal Clean Air Act, such as establishing and reviewing the National Ambient Air Quality Standards (NAAQS) and judging the adequacy of State Implementation Plans to attain the NAAQS. A State Implementation Plan must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. If a State fails to enforce its implementation approved regulations, or if the EPA determines that a State’s Implementation Plan is inadequate, the EPA is required to prepare and enforce a Federal Implementation Plan to promulgate comprehensive control measures for a given State Implementation Plan.

¹⁰ City of Oakland, 2010. 2007-2014 Housing Element EIR, Section 3.3, Air Quality, August.

The CARB is responsible for establishing and reviewing the California Ambient Air Quality Standards (CAAQS), developing and managing the California Implementation Plan, identifying TACs, and overseeing the activities of regional air quality management districts. In California, mobile emissions sources (e.g., construction equipment, trucks, and automobiles) are regulated by the CARB, and stationary emissions sources (e.g., industrial facilities) are regulated by the regional air quality management districts.

The CAAQS and NAAQS, which were developed for criteria air pollutants, are intended to incorporate an adequate margin of safety to protect the public health and welfare. California also has ambient air quality standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. To achieve CAAQSs, criteria air pollutant emissions are managed through control measures described in regional air quality plans as well as emission limitations placed on permitted stationary sources.

In accordance with the federal Clean Air Act and California Clean Air Act, areas in California are classified as either in attainment, maintenance (i.e., former nonattainment), or nonattainment of the NAAQS and CAAQS for each criteria air pollutant. To assess the regional attainment status, the BAAQMD collects ambient air quality data from over 30 monitoring sites within the SFBAAB. Based on current monitoring data, the SFBAAB is designated as a nonattainment area for ozone, PM₁₀, and PM_{2.5}, and is designated an attainment or unclassified area for all other pollutants (see Table V.C-2).

Regulation of TACs, referred to as hazardous air pollutants (HAPs) under federal regulations, is achieved through federal, State, and local controls on individual sources. The air toxics provisions of the federal Clean Air Act require the EPA to identify HAPs that are known or suspected to cause cancer or other serious health effects to protect public health and welfare, and to establish National Emission Standards for Hazardous Air Pollutants. California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act created California's program to identify and reduce exposure to TACs. To date, the CARB has identified over 21 TACs and adopted the EPA's list of 187 HAPs as TACs. The Hot Spots Act supplements the Tanner Act by requiring a statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

b. Bay Area Air Quality Management District Responsibilities

The BAAQMD is primarily responsible for ensuring that the NAAQS and CAAQS are attained and maintained in the SFBAAB. The BAAQMD fulfills this responsibility by adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits, inspecting stationary sources of air pollutants, responding to citizen complaints, and monitoring ambient air quality

TABLE V.C-2 AIR QUALITY STANDARDS AND ATTAINMENT STATUS

Pollutant	Averaging Time	CAAQS		NAAQS	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone	8-Hour	0.070 ppm	N	0.070 ppm	N
	1-Hour	0.09 ppm	N	Revoked in 2005	---
Carbon Monoxide (CO)	8-Hour	9.0 ppm	A	9 ppm	A
	1-Hour	20 ppm	A	35 ppm	A
Nitrogen Dioxide (NO ₂)	1-Hour	0.18 ppm	A	0.100 ppm	U
	Annual	0.030 ppm	---	0.053 ppm	A
Sulfur Dioxide (SO ₂)	24-Hour	0.04 ppm	A	0.14 ppm	A
	1-Hour	0.25 ppm	A	0.075 ppm	A
	Annual	---	---	0.030 ppm	A
Respirable Particulate Matter (PM ₁₀)	Annual	20 µg/m ³	N	---	---
	24-Hour	50 µg/m ³	N	150 µg/m ³	U
Fine Particulate Matter (PM _{2.5})	Annual	12 µg/m ³	N	12 µg/m ³	U/A
	24-Hour	---	---	35 µg/m ³	N
Sulfates	24-Hour	25 µg/m ³	A	---	---
	30-Day	1.5 µg/m ³	A	---	---
Lead	Calendar Quarter	---	---	1.5 µg/m ³	A
	Rolling 3-Month	---	---	0.15 µg/m ³	A
Hydrogen Sulfide	1-Hour	0.03 ppm	U	---	---
Vinyl Chloride	24-Hour	0.010 ppm	U	---	---
Visibility Reducing Particles	8 Hour (10:00 to 18:00 PST)	---	U	---	---

Notes: A = Attainment; N = Nonattainment; U = Unclassified; "—" = not applicable; ppm = parts per million; µg/m³ = micrograms per cubic meter; PST = Pacific Standard Time.
Source: Bay Area Air Quality Management District (BAAQMD), 2017. Air Quality Standards and Attainment Status. Available at: <http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status>, accessed April 10, 2019. Last updated January 5, 2017.

and meteorological conditions. The BAAQMD also awards grants to reduce motor vehicle emissions and conducts public education campaigns and other activities associated with improving air quality within the SFBAAB.

The demolition of existing buildings and structures are subject to BAAQMD's Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing), which limits asbestos emissions from demolition or renovation of structures and the associated disturbance of asbestos-containing waste material generated or handled during these activities. The rule addresses the national emissions standards for asbestos and contains additional requirements. The rule requires the lead agency and its contractors to notify the BAAQMD of any regulated renovation or demolition activity. The notification must include a description of the affected structures and the methods used to determine the presence of asbestos-containing materials. All asbestos-containing material found on site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, which includes specific requirements for surveying, notification, removal, and disposal of materials that contain asbestos. Therefore, projects that comply with Regulation 11, Rule 2, would ensure that asbestos-containing materials would be disposed of appropriately and safely.

The use of odorous compounds is subject to BAAQMD's Regulation 7, which places general limitations on odorous substances and specific emission limitations on certain odorous compounds. The regulation limits the "discharge of any odorous substance which causes the ambient air at or beyond the property line...to be odorous and to remain odorous after dilution with four parts of odor-free air." The BAAQMD must receive odor complaints from 10 or more complainants within a 90-day period in order for the limitations of this regulation to go into effect. If this criterion has been met, an odor violation can be issued by the BAAQMD if a test panel of people can detect an odor in samples collected periodically from the source.

The BAAQMD's CEQA Air Quality Guidelines¹¹ include thresholds of significance to assist lead agencies in evaluating and mitigating air quality impacts under CEQA. The BAAQMD's thresholds, which have been adopted by the City of Oakland, established levels at which emissions of ozone precursors (ROG and NO_x), PM₁₀, PM_{2.5}, local CO, TACs, and odors could cause significant air quality impacts. The scientific soundness of the thresholds is supported by substantial evidence presented in the BAAQMD's Revised Draft Options and Justification Report.¹²

c. Bay Area Clean Air Plan

In accordance with the California Clean Air Act, the BAAQMD is required to prepare and update an air quality plan that outlines measures by which both stationary and mobile sources of pollutants can be controlled to achieve the NAAQS and CAAQS in areas designated as

¹¹ Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, May.

¹² Bay Area Air Quality Management District (BAAQMD), 2009. Revised Draft Options and Justification Report; California Environmental Quality Act Thresholds of Significance, October.

nonattainment. In April 2017, the BAAQMD adopted the 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 CAP), which includes 85 control measures to reduce ROG, NO_x, PM₁₀, PM_{2.5}, TACs, and greenhouse gases (GHGs).¹³ The 2017 CAP was developed based on a multi-pollutant evaluation method that incorporates well-established studies and methods on quantifying the health benefits and air quality regulations, computer modelling and analysis of existing air quality monitoring data and emission inventories, and growth projections prepared by the Metropolitan Transportation Commission and the Association of Bay Area Government.

d. City of Oakland

The following subsection summarizes relevant air quality policies and standards from the General Plan, Municipal Code, and SCAs.

(1) General Plan

The following air quality policies from the Open Space, Conservation and Recreation Element of the City of Oakland General Plan would relate to the Specific Plan and its associated development.

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-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.)

¹³ Bay Area Air Quality Management District (BAAQMD), 2017. 2017 Clean Air Plan: Spare the Air, Cool the Climate, April 19.

- 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.

(2) City of Oakland Municipal Code

Chapter 15.34 of the Oakland Municipal Code requires new construction projects to submit a Waste Reduction and Recycling Plan to the City's Building Official for review and approval. The intent of the provisions are to divert (e.g., reuse on-site) at least 50 percent of construction and demolition debris from landfills. The purpose of these provisions is to prescribe requirements designed to meet and further the goals of the California Integrated Waste Management Act of 1989 AB 939 and the Alameda County Waste Reduction and Recycling Act of 1990 (Measure D).

Chapter 15.36 of the Municipal Code requires the implementation of the following dust control measures during demolition activities:

- "Best manager 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.

(3) Standard Conditions of Approval

The City's SCAs that are relevant to air quality are listed below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-AIR-1: Dust Controls – Construction Related (#21)

Applicable To: All projects involving construction activities.

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 off-site. 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-AIR-2: Criteria Air Pollutant Controls – Construction Related (#22)

Applicable To: All projects involving construction activities.

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

[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, NO_x, or PM_{2.5} or 82 pounds per day of PM₁₀. In most cases, criteria pollutants from construction will not require SCA measures, but analysis must be performed to determine applicability for projects that exceed 100,000 square feet of non-residential development or 200 residential dwelling units.

a) 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, NO_x, or PM_{2.5} or 82 pounds per day of PM₁₀. 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.

b) 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 Air 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 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.

When Required: Prior to issuance of a construction related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-AIR-3: Diesel Particulate Matter Controls-Construction Related (#23)

Applicable To: All projects involving construction activities involving greater than 100 dwelling units or 50,000 square feet of non-residential floor area OR for any project involving construction activities involving greater than 50 dwelling units or 25,000 square feet of non-residential floor area for any area defined as needing "Best Practices" or needing "Further Study" on the BAAQMD Healthy Places Map (<http://www.baaqmd.gov/plans-and-climate/planning-healthy-places>) which are typically within 1000 feet of a freeway or along major thoroughfares.

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.

When Required: Prior to issuance of a construction related permit (i), during construction (ii)

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to issuance of a construction related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-AIR-4: Exposure to Air Pollution (Toxic Air Contaminants) (#24)

Applicable To: All projects that meet all of the following criteria:

- a) The project involves any of the following sensitive land uses:
 - i. Residential uses (new dwelling units, excluding secondary units); or
 - ii. New or expanded schools, daycare centers, parks, nursing homes, or medical facilities; and
- b) The project is located within 1,000' (or other distance as specified below) of one or more of the following sources of air pollution:
 - i. Freeway;
 - ii. Roadway with significant traffic (at least 10,000 vehicles/day);
 - iii. Rail line (except BART) with over 30 trains per day;
 - iv. Distribution center that accommodates more than 100 trucks per day, more than 40 trucks with operating Transportation Refrigeration Units (TRU) per day, or where the TRU unit operations exceed 300 hours per week;
 - v. Major rail or truck yard (such as the Union Pacific rail yard adjacent to the Port of Oakland);
 - vi. Ferry terminal;
 - vii. Stationary pollutant source requiring a permit from BAAQMD (such as a diesel generator);
 - viii. Within 0.5 miles of the Port of Oakland or Oakland Airport;
 - ix. Within 300 feet of a gas station; or
 - x. Within 300 feet of a dry cleaner with a machine using PERC (or within 500 feet of a dry cleaner with two or more machines using PERC); and

- c) The project exceeds the health risk screening criteria after a screening analysis is conducted in accordance with the Bay Area Air Quality Management (BAAQMD) CEQA Guidelines.

a) Health Risk Reduction Measures

Requirement: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. 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 California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. 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 that 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.

- or -

- ii. 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:
- Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 [insert MERV-16 for projects located in the West Oakland Specific Plan area] or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required.
 - Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph).
 - Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.
 - The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods.
 - Sensitive receptors shall be located on the upper floors of buildings, if feasible.
 - Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (*Pinus nigra* var. *maritima*), Cypress (*X Cupressocyparis leylandii*), Hybrid poplar (*Populus deltoids* X *trichocarpa*), and Redwood (*Sequoia sempervirens*).
 - Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible.
 - Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible.

- Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible:
 - Installing electrical hook-ups for diesel trucks at loading docks.
 - Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards.
 - Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels.
 - Prohibiting trucks from idling for more than two minutes.
 - Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

b) Maintenance of Health Risk Reduction Measures

Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-AIR-5: Stationary Sources of Air Pollution (Toxic Air Contaminants) (#25)

Applicable To: All projects that involve a stationary pollutant source requiring a permit from BAAQMD, including but not limited to back-up diesel generators. The California Building Code requires back-up diesel generators for all buildings over 70 feet tall.

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.
- 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-AIR-6: Truck-Related Risk Reduction Measures (Toxic Air Contaminants) (#26)

Applicable To: All projects that involve new truck loading docks or a truck fleet of any size registered to the project applicant/operator.

a) Truck Loading Docks

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

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to building permit final; ongoing

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-AIR-7: Asbestos in Structures (#27)

Applicable To: All projects involving either of the following: a. Demolition of structures; or b. Renovation of structures known to contain or may contain asbestos.

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Applicable regulatory agency with jurisdiction

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

3. Impacts, Standard Conditions of Approval and Mitigation Measures

This section analyzes environmental impacts related to air quality that could result from the implementation of the Specific Plan and reasonably foreseeable development expected to occur under the Plan. The section begins with the criteria of significance that establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would result in a significant air quality impact if it would:

Plan-Level Impacts

1. Fundamentally conflict with the primary goals of the Bay Area Clean Air Plan (CAP);
2. Fundamentally conflict with the CAP because the plan does not demonstrate reasonable efforts to implement control measures contained in the CAP or the plan conflicts with or obstructs implementation of any control measures in the CAP;
3. Not include special overlay zones containing goals, policies, and objectives to minimize potential Toxic Air Contaminant (TAC) impacts in areas located (a) near existing and planned sources of TACs and (b) within 500 feet of freeways and high-volume roadways containing 100,000 or more average daily vehicle trips; or
4. Not identify existing and planned sources of odors with policies to reduce potential odor impacts.

Project-Level Impacts

5. 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 PM₁₀.
6. 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 PM₁₀, 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 PM₁₀.
7. Contribute to CO concentrations exceeding the CAAQS of 9 parts per million (ppm) averaged over 8 hours or 20 ppm over 1 hour.

[NOTE: Pursuant to BAAQMD CEQA Guidelines, 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.]

8. 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) a non-cancer risk (chronic or acute) hazard index greater than 1.0, or
 - (c) an increase of annual average PM_{2.5} of greater than 0.3 micrograms per cubic meter;or, under cumulative conditions, 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} of greater than 0.8 micrograms per cubic meter.

[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.]

9. Expose new sensitive receptors to substantial ambient 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} of greater than 0.8 micrograms per cubic meter.

[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 (10,000 or greater 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.]

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

[NOTE: For this threshold, sensitive receptors include residential uses, schools, daycare centers, nursing homes, and medical centers (but not parks).]

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions

have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Project Analysis Approach

(1) Plan-Level Analysis

The Specific Plan is a regulatory program and would result in new planning policies and controls for land use to accommodate additional jobs and housing. The Plan itself would not result in direct physical changes to the existing environment. Indirect effects from the Plan could result as future development projects could replace existing residences and businesses, or increase space for residences or businesses in the Plan Area. The BAAQMD has adopted plan-level thresholds of significance to assist lead agencies in the evaluation and mitigation of air quality impacts under CEQA. The BAAQMD's plan-level thresholds of significance, which the City of Oakland has adopted and incorporated into their significance criteria, established criteria for which the collective development of future project in a plan area could cause significant air quality impacts related to criteria air pollutants, TACs, and odors. Therefore, the BAAQMD's CEQA Air Quality guidance¹⁴ was used to evaluate plan-level impacts associated with the Specific Plan.

(2) Project-Level Analysis

This analysis also considers potential construction and operational emissions impacts for projects that may be developed under the Specific Plan. The BAAQMD's project-level thresholds of significance, which the City of Oakland has adopted and incorporated into their significance criteria, identify levels at which individual projects could cause significant air quality impacts related to emissions of ozone precursors (ROG and NO_x), PM₁₀, PM_{2.5}, CO, TACs, and odors. Therefore, the BAAQMD's CEQA Air Quality guidance¹⁵ was used to evaluate project-level impacts associated with the Specific Plan.

c. Project Analysis and Findings

Adoption of the Specific Plan would facilitate development and growth within the Plan Area. The potential impacts that are identified are analyzed within the context of existing plans and policies, permitting requirements, local ordinances, and the City of Oakland's SCAs. Impacts that would be substantially reduced or eliminated by compliance with these policies or requirements are found to be less than significant.

¹⁴ Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, May.

¹⁵ Ibid.

(1) Plan-Level Consistency with the Bay Area Clean Air Plan (Criteria 1 and 2)

According to the BAAQMD,¹⁶ operational-related criteria air pollutant and precursor impacts would be less than significant if a proposed plan satisfies the following criteria:

- Consistency with control measures from the current 2017 CAP; and
- A projected rate of increase in vehicle miles traveled (VMTs) less than or equal to the rate of increase in population.

Consistency may be determined by evaluating whether the Specific Plan supports the primary goals of the 2017 CAP, including applicable control measures contained within the 2017 CAP, and would not conflict with or obstruct implementation of any 2017 CAP control measures. The primary goals of the 2017 CAP are the attainment of ambient air quality standards and reduction of population exposure to air pollutants for the protection of public health in the Bay Area.

The 2017 CAP includes control measures that aim to reduce air pollution and GHGs from stationary, area, and mobile sources. The control measures are organized into nine categories: stationary sources, transportation, buildings, energy, agriculture, natural and working lands, waste, water, and super-GHG pollutants (e.g., methane, black carbon, and fluorinated gases). As described in Table V.C-3, the Specific Plan would be consistent with applicable control measures from the 2017 CAP.

The BAAQMD considers reductions in VMT a key strategy for achieving the federal and State ambient air quality standards for ozone, PM₁₀, and PM_{2.5}. The existing (2020) residential population, employment, and service population (residents and workers) in the Plan Area was estimated using data from the Metropolitan Transportation Commission's (MTC's) Travel Model for the Downtown Oakland Transportation Analysis Zones (TAZ) 945, 946, 966, 967, 968, 969, 970, and 971. The 2040 residential population, employment, and service population in the Plan Area were estimated based on the projected growth under the Specific Plan (see *Section V.L, Population and Housing*). The total VMT in the Plan Area for 2020 and 2040 were estimated by multiplying the VMT per capita and VMT per worker (see *Section V.B, Traffic and Transportation*) by the residential estimated residential population and employment, respectively, and then adding those values together. Table V.C-4, summarizes the estimated increase in residential population, employment, service population, and VMT in the Plan Area.

¹⁶ Ibid.

TABLE V.C-3 PLAN CONSISTENCY WITH BAAQMD'S 2017 CAP

Control Measures	Proposed Project Consistency
Stationary Source	The stationary source measures, which are designed to reduce emissions from stationary sources, are incorporated into rules adopted by the BAAQMD and then enforced by the BAAQMD's Permit and Inspection programs. Future development in the Plan Area would be subject to the BAAQMD's permitting requirements for stationary sources. Therefore, the Specific Plan would be consistent with the stationary source control measures of the 2017 CAP.
Transportation	The transportation control measures are designed to reduce vehicle trips, use, miles traveled, idling, or traffic congestion for the purpose of reducing vehicle emissions. The Specific Plan promotes infill mixed-use development that would locate residents near employment/schooling opportunities and encourage alternative modes of travel to reduce vehicle emissions. Plan Policies CH-2.1 and CH-2.2 support clean transportation modes and land-use regulations to reduce VMT. Strategies associated with these policies include developing a zoning hierarchy that coordinates higher intensity development around transit stations and employment hubs downtown; increasing transportation demand management requirements for new developments; supporting an interconnected bicycle and pedestrian network (see Outcome M-1); tailoring parking policies to reduce vehicle trips (Policy M-3.7); supporting affordable, safe, and reliable public transportation options (see Outcome M-2); promoting fuel-efficient vehicles and low-carbon fuels (Policy M-3.4); accelerate the electrification of vehicles (Policy CH-2.13); and establishing partnerships with the Port of Oakland to reduce Port-related emissions. Therefore, the Specific Plan would be consistent with the transportation control measures in the 2017 CAP.
Energy	The energy control measures are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity generation. Since these measures primarily apply to electrical utility providers, the energy control measures of the 2017 CAP are not applicable to the Plan Area. Electricity in the Plan Area is currently supplied by Pacific Gas and Electric Company (PG&E), which supplies 70 percent of its electric power mix from a combination of renewable and greenhouse-gas free sources. ^a
Buildings	The BAAQMD has authority to regulate emissions from certain sources in buildings such as boilers and water heaters, but has limited authority to regulate buildings themselves. Therefore, the building control measures focus on working with local governments that have authority over local building codes to facilitate adoption of best practices and policies to control GHG emissions. Future projects within the Plan Area will be required to comply with the local building codes and indoor lighting systems would meet the minimum code efficiency requirements for Title-24 Building Energy Efficiency Standards, such as light emitting diode (LED) lighting, occupancy sensors in offices, and daylight dimming controls at the perimeter zones. Policy CH-2.14 also promotes updated codes for new buildings to eliminate gas heating systems by 2030 and eliminate fossil fuel use in all buildings by 2050. Therefore, the Specific Plan would be consistent with the buildings control measures of the 2017 CAP.
Agriculture	The agriculture control measures are designed to primarily reduce emissions of methane. Since the Specific Plan does not include any agricultural activities, the agriculture control measures of the 2017 CAP are not applicable to the Plan Area.

TABLE V.C-3 PLAN CONSISTENCY WITH BAAQMD'S 2017 CAP

Control Measures	Proposed Project Consistency
Natural and Working Lands	The control measures for the natural and working lands sector focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to adopt ordinances that promote urban-tree plantings. Since the Specific Plan does not include the disturbance of any rangelands or wetlands, the natural and working lands control measures of the 2017 CAP are not applicable to the Plan Area.
Waste Management	The waste management measures focus on reducing or capturing methane emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. Future projects in the Plan Area would comply with local requirements for waste management (e.g., recycling and composting services). Therefore, the Specific Plan would be consistent with the waste management control measures of the 2017 CAP.
Water	The water control measures to reduce emissions from the water sector will reduce emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works, and promoting the use of biogas recovery systems. Since these measures primarily apply to publicly owned treatment works (sewage treatment plant that is owned, and usually operated, by a government agency), the water control measures of the 2017 CAP are not applicable to the Plan Area.
Super GHGs	The super-GHG control measures are designed to facilitate the adoption of best GHG control practices and policies through the BAAQMD and local government agencies. Policies CH-2.1, CH-2.2, and CH-2.13 support clean transportation modes and land-use regulations to reduce VMT to reduce GHG emissions from transportation. Policy CH-2.14 promotes updated codes for new buildings to eliminate gas heating systems by 2030 and eliminate fossil fuel use in all buildings by 2050. The City has also adopted an Energy and Climate Action Plan (ECAP), which was updated in 2018. The ECAP identified strategies to achieve a reduction in GHG emissions of 36 percent over eight years (the 2020 Plan). In addition, the City of Oakland is guided by the Pathways to Deep GHG Reductions in Oakland (CURB Analysis). Between September 2016 and February 2018, Bloomberg Associates worked with the City of Oakland to identify opportunities and measure the impact of long-term GHG reductions. Future development in the Plan Area would comply with the ECAP and Specific Plan policies for GHG reductions. Therefore, the Specific Plan would be consistent with the super-GHG control measures of the 2017 CAP.

^a Source: Pacific Gas and Electric (PG&E), 2017. Clean Energy Solutions. Available at: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page, accessed October 30.

TABLE V.C-4 SUMMARY OF EXISTING AND FUTURE VEHICLE MILES TRAVELED AND POPULATION

	2020 Existing Conditions	2040 Conditions with Specific Plan	Net Increase
Residential Population	24,636 ^a	64,400 ^b	261%
Employment	93,381 ^a	79,800 ^b	85%
Service Population	118,017 ^a	144,200 ^b	122%
Vehicle Miles Traveled ^c	1,528,306	2,420,209	158%

^a Based on MTC Travel Demand Model for TAZ 945, 946, 966, 967, 968, 969, 970, and 971.

^b Based on projected growth under the Specific Plan (see *Chapter, III Project Description*, Table III-6 (Active Development + Plan Future Development)).

^c Based on VMT per capita and VMT per worker reported for TAZ 945, 946, 966, 967, 968, 969, 970, and 971 (see Chapter V.B, Traffic and Transportation).

The Specific Plan includes several policies mentioned in Table V.C-3 that ensure the Specific Plan would not conflict with or obstruct implementation of the 2017 CAP. These policies include the following:

Policy M-3.7: Expand the Park Oakland program to additional areas of Downtown Oakland to manage public parking to balance the diverse needs of Downtown Oakland’s visitors, merchants, commuters and residents. Goals include ensuring parking availability; increasing ADA-accessible parking and passenger loading with the objectives of serving the needs of people with disabilities, seniors, and downtown businesses; reducing the number of motorists circulating to find parking; balancing the needs placed on curb space; and better managing parking resources and demand. Actions include:

- Increase ADA-accessible parking and passenger loading with the objectives of serving the needs of people with disabilities, seniors, and businesses.
- Implement real-time parking signage to display parking availability and pricing.
- Adopt the Sensor Independent Rate Adjustment (SIRA) methodology developed for San Francisco’s SFpark to monitor parking occupancy in real time.
- Establish parking benefit districts in which a portion of parking revenues are used for improvements in the areas where the funds are collected.
- Give existing merchant and neighborhood organizations, such as Business Improvement Districts and Cultural Districts, a significant advisory role in deciding how to spend their local parking benefit district’s revenues.
- Establish a committee, with significant representation from people with disabilities, to propose reforms to (a) improve curb parking availability for people with disabilities, and (b) reduce Disabled Placard fraud and abuse.

Policy M-3.3: Establish parking maximums, include requirements for electric vehicle charging and consider a means by which developers can build parking up to 1.25 spaces per unit in exchange for providing community benefits.

Policy CH-2.1: Develop policy to support clean transportation modes to reduce vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions.

Policy CH-2.2: Coordinate land-use regulations and transportation policies for reductions in vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions that meet citywide targets established in the resolutions by Council and the City's Energy and Climate Action Plan (ECAP).

Policy CH-2.13: Accelerate the electrification of private vehicles and low capacity taxi/TNC vehicles, aiming to improve air quality by significantly reducing tailpipe emissions from transportation.

Policy CH-2.14: Transition to natural gas-free buildings to reduce safety and air quality/health risks in buildings.

Using 2020 as a baseline year, VMT attributable to the Specific Plan is anticipated to increase 158 percent by 2040. The service populations in the Plan Area would increase 122 percent during the same period. With full development under the Specific Plan by 2040, VMT and associated criteria air pollutant emissions would increase at a lower rate than the population growth. Based on the BAAQMD's CEQA Air Quality Guidelines, the Specific Plan would not conflict with or obstruct implementation of the 2017 CAP and the associated operational-related criteria air pollutant and precursor impacts would be less than significant. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the Plan's consistency with the Bay Area Clean Air Plan.

(1) Plan- and Project-Level Generation and Exposure to Toxic Air Contaminants (Criteria 3, 8, and 9)

As discussed in the Setting subsection, above, the BAAQMD's *Planning Healthy Places* guidance has mapped local areas with elevated levels of PM_{2.5} and/or TAC pollution (Figure V.C-1, as updated by BAAQMD). At present, the vast majority of the Plan Area is located in an area with elevated air pollution that exceeds an excess cancer risk of 100 in a million or PM_{2.5} concentrations of 0.8 micrograms per cubic meter, or within 500 feet of a freeway, 175 feet of a major roadway (>30,000 annual average daily traffic), or 500 feet of a ferry terminal. Future development within the Plan Area would generate TACs and PM_{2.5} emissions from vehicle trips and stationary sources which could substantially contribute to the existing poor air quality in the Plan Area and expose existing and future sensitive receptors to substantial pollutant concentrations. As part of the BAAQMD's *Planning Healthy Places* guidance,¹⁷ the BAAQMD will maintain and update mapping of local air pollution over time.

¹⁷ Bay Area Air Quality Management District (BAAQMD), 2016. *Planning Healthy Places; A Guidebook for Addressing Local Sources of Air Pollutants in Community Planning*, May.

The City's SCA-AIR-3, Diesel Particulate Matter Controls – Construction Related (#23), would apply to construction projects with more than 50 dwelling units or 25,000 square feet of non-residential located in areas mapped by BAAQMD with elevated air pollution or requiring further study (Figure V.C-1, as updated by BAAQMD). Prior to approval of a construction permit, the project applicant must either prepare a detailed HRA and/or implement DPM reduction measures, such as equipping all off-road diesel equipment with the most effective Verified Diesel Emission Control Strategies available for the engine type.

The City's SCA-AIR-4, Exposure to Air Pollution (Toxic Air Contaminants) (#24), would apply to residential development in areas mapped by BAAQMD with elevated air pollution (Figure V.C-1, as updated by BAAQMD). Prior to approval of a construction permit in areas with elevated air pollution, the project applicant must either prepare a detailed HRA and/or incorporate health risk reduction measures into the project, such as the installation of high-efficiency air filtration systems rated MERV-13 or higher to reduce cancer risks from exposure to DPM and PM_{2.5}.

The City's SCA-AIR-5, Stationary Sources of Air Pollution (Toxic Air Contaminants) (#25), would apply to all projects that involve a stationary pollutant source requiring a permit from BAAQMD. Prior to approval of a construction permit, the project applicant must either prepare a detailed HRA or incorporate health risk reduction measures into the project, such as the 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.

The City's SCA-AIR-6, Truck-Related Risk Reduction Measures (Toxic Air Contaminants) (#26), would apply to all projects that involve new truck loading docks or truck fleets. The project applicant must locate proposed truck loading docks as far from nearby sensitive receptors as feasible and new truck fleets must demonstrate compliance with all applicable CARB requirements to control emissions from diesel engines.

The City's SCA-AIR-7, Asbestos in Structures (#27), would apply to all projects that involve demolition or renovation of structures with known or potential asbestos-containing materials. The project applicant must comply with all applicable laws and regulations, including BAAQMD Regulation 11, Rule 2, to ensure asbestos-containing materials are properly disposed and no visible emissions are generated to outside air.

The BAAQMD's *Planning Healthy Places* map of local air pollution (Figure V.C-1, as updated by BAAQMD) and the City's SCAs related to TACs and PM_{2.5} emissions function as an overlay zone with specific requirements to reduce the generation TACs and PM_{2.5}, as well as the exposure of existing and future sensitive receptors to substantial concentrations of TACs and PM_{2.5}. Because SCA-AIR-3, Diesel Particulate Matter Controls – Construction Related (#23); SCA-AIR-4, Exposure to Air Pollution (Toxic Air Contaminants) (#24); SCA-AIR-5, Stationary Sources of Air Pollution (Toxic Air Contaminants) (#25); SCA-AIR-6, Truck-Related Risk Reduction Measures (Toxic Air

Contaminants) (#26); and SCA-AIR-7, Asbestos in Structures (#27), would be incorporated as part of the Specific Plan, adopted as conditions of approval, and required, as applicable, of the development under the Specific Plan, the impact of substantial TACs and PM_{2.5} concentrations on existing and future sensitive receptors would be less than significant. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to plan- and project-level generation and exposure to toxic air contaminants.

(2) Plan- and Project-Level Sources of Odors (Criteria 4 and 10)

The effect of the environment on future development in the Plan Area (as compared to a project's impact on the environment) is not a topic that is required to be analyzed under CEQA. Therefore, existing sources of odors in the Plan Area are described only for the purpose of providing information to the decision-makers and public, below.

In accordance with the recommendations in the BAAQMD guidelines,¹⁸ the City of Oakland created a map of known odor sources including: food processing facilities; chemical manufacturers; painting and coating operations; green waste and recycling; and the East Bay Municipal Utility District wastewater treatment facility.¹⁹ This map presents an estimation of all the known odor sources of concern within the City of Oakland, based upon City's business tax records of the industry categories identified by the BAAQMD. As discussed in the Setting, above, existing sources of odors mapped in the Plan Area include food processing facilities.

Future sources of potential odors in the Plan Area would generally be consistent with existing land uses, and may include a few light industrial developments (e.g., auto body shops), if any, and restaurants. Major sources of new odor emissions, such as wastewater treatment facilities, landfills, and transfer stations, are not expected in the Plan Area. The BAAQMD considers an existing odor source to have a substantial number of odor complaints if the complaint history includes five or more confirmed complaints per year averaged over a 3-year period. According to the BAAQMD, there has been only one confirmed odor complaint in the Plan Area for the 3-year period from January 1, 2016 to January 1, 2018, which was related to a café.²⁰ Based on the existing land uses, future sources of potential odor emissions in the Plan Area are unlikely to generate a substantial number of complaints, if any. Additionally, BAAQMD Regulation 7 places general limitations on odorous substances and specific emission limitations on certain odorous compounds. No major new odor sources that could generate a substantial number of complaints

¹⁸ Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, May.

¹⁹ City of Oakland, 2010. 2007-2014 Housing Element EIR, Section 3.3, Air Quality, August.

²⁰ Paul Grazzini, Air Quality Specialist. Bay Area Air Quality Management District (BAAQMD), 2017. Email communication with Patrick Sutton, Baseline Environmental Consulting, May 23.

are expected to be developed in the Plan Area. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to plan- and project-level sources of odors.

(3) Project-Level Construction Emissions of Criteria Air Pollutants (Criterion 5)

Construction activities for future developments in the Plan Area would generate criteria air pollutant emissions that could potentially affect regional air quality. During construction, the primary pollutant emissions of concern would be ROG, NO_x, PM₁₀, and PM_{2.5} from the exhaust of off-road construction equipment and on-road construction vehicles related to worker vehicles, vendor trucks, and haul trucks. In addition, fugitive dust emissions of PM₁₀ and PM_{2.5} would be generated by soil disturbance and demolition activities, and fugitive ROG emissions would result from the application of architectural coatings and paving.

The generation of fugitive dust PM₁₀ and PM_{2.5} emissions from soil disturbance and demolition activities could result in a cumulatively considerable net increase in regional PM₁₀ and PM_{2.5} concentrations. The City's SCA-AIR-1, Dust Controls – Construction Related (#21), includes basic dust controls that apply to all projects, as well as enhanced controls that apply to projects with extensive site preparation or soil transport. Neither the BAAQMD nor the City has a quantitative threshold of significance for fugitive dust PM₁₀ and PM_{2.5} emissions; however, the BAAQMD considers implementation of best management practices (BMPs) to control dust during construction sufficient to reduce potential impacts to a less-than-significant level. Implementation of dust control measures under SCA-AIR-1 would satisfy the BAAQMD's requirement for BMPs during construction. Because SCA-AIR-1 would be incorporated as part of the Specific Plan, adopted as a condition of approval, and required for all future development projects in the Plan Area, the increase in PM₁₀ and PM_{2.5} concentrations from dust generated during project construction activities would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment.

The generation of ROG, NO_x, PM₁₀, and PM_{2.5} emissions from the exhaust of off-road construction equipment and on-road vehicles and fugitive ROG emissions from the application of architectural coatings and paving could result in a cumulatively considerable net increase in criteria air pollutants. The City's SCA-AIR-2, Criteria Air Pollutant Controls – Construction Related (#22), includes basic controls for criteria air pollutant emissions that apply to all projects, as well as enhanced controls for projects with more than 100,000 square feet of non-residential development or 200 residential dwelling units. The enhanced controls require a qualified air quality consultant to evaluate and identify (if needed) criteria air pollutant reduction measures to reduce the project's average daily emissions below 54 pounds per day of ROG, NO_x, or PM_{2.5} or

82 pounds per day of PM₁₀. As a result, the generation of ROG, NO_x, PM₁₀, and PM_{2.5} emissions from the exhaust of off-road construction equipment and on-road vehicles and fugitive ROG emissions from the application of architectural coatings and paving would not result in a cumulatively considerable net increase in criteria air pollutants for which the region is in nonattainment. SCA-AIR-2 would be incorporated as part of the Specific Plan, adopted as a condition of approval, and required for all future development projects in the Plan Area. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to project-level construction emissions of criteria air pollutants.

(4) Project-Level Operational Emissions of Criteria Air Pollutants (Criterion 6)

Impact AIR-1: Operation of some large development projects under the Specific Plan could result in a cumulatively considerable net increase of criteria air pollutants for which the region is in nonattainment. (S)

Project operations in the Plan Area would generate ROG, NO_x, and exhaust PM₁₀ and PM_{2.5} emissions that could result in a cumulatively considerable net increase of criteria air pollutants for which the region is in nonattainment. The primary criteria air pollutant sources during project operation would be mobile sources, energy use, area sources (e.g., consumer products and architectural coatings), and stationary sources. It is possible that individual development projects, if large enough, could result in significant effects related to emissions of criteria air pollutants, even if the overall plan is determined to have a less-than-significant impact.

The BAAQMD CEQA Guidelines include screening criteria to determine if operational emissions of ROG, NO_x, and exhaust PM₁₀ and PM_{2.5} from a project could potentially exceed the BAAQMD's thresholds of significance, which have been adopted by the City of Oakland and incorporated their significance criteria. A project that exceeds the screening criteria would require a detailed air quality assessment to determine whether emissions would exceed the City's significance thresholds and result in a cumulatively considerable net increase of criteria air pollutants for which the region is in nonattainment. The screening criteria for land uses expected in the Plan Area are shown in Table V.C-5.

Individual projects that would exceed the BAAQMD screening criteria are assumed to have the potential to result in criteria air pollutant emissions that could exceed the City's significance thresholds. However, it should be noted that the BAAQMD's screening table is conservative because they don't take into account future reductions in criteria air pollutant emissions due to federal, State, and local regulations and policies. For example, vehicle emissions are expected to improve over time with the implementation of federal and State vehicle emissions and fuel

TABLE V.C-5 OPERATIONAL CRITERIA AIR POLLUTANT SCREENING FOR EXPECTED PLAN AREA USES

Land Use Type	Screening Size (Pollutant of Concern in Parentheses)
Apartment, Low-Rise	451 du (ROG)
Apartment, Mid-Rise	494 du (ROG)
Apartment, High-Rise	510 du (ROG)
Day-Care Center	53 ksf (NOX)
Junior College (2 Years)	152 ksf (NOX)
Place of Worship	439 ksf (NOX)
Quality Restaurant	47 ksf (NOX)
High Turnover Restaurant	33 ksf (NOX)
Fast Food Rest. W/ Drive Thru	6 ksf (NOX)
Hotel	489 rooms (NOX)
Retail Store	83 ksf (NOX)
Supermarket	42 ksf (NOX)
Convenience Market (24-Hour)	5 ksf (NOX)
Convenience Market with Gas Pumps	4 ksf (NOX)
Bank (with Drive-Through)	17 ksf (NOX)
General Office Building	346 ksf (NOX)
Pharmacy/Drugstore	48 ksf (NOX)
Medical Office Building	117 ksf (NOX)
Warehouse	864 ksf (NOX)
General Light Industry	541 ksf (NOX)

Notes: du = dwelling units; ksf = thousand square feet; NOX = oxides of nitrogen; ROG = reactive organic gases.

Screening levels include indirect and area source emissions, but not back-up generators or industrial sources. Source: Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, May.

economy standards. The Specific Plan also includes policies and strategies that encourage walking, biking, and transit, including a Transportation and Parking Demand Management program that would reduce vehicle trips and associated criteria air pollutant emissions (see *Section V.B, Traffic and Transportation*). The BAAQMD's screening table also doesn't take into account long-term emission reductions that would result from implementation of updates to California's energy efficiency laws, which will continue to drive significant improvements in building efficiency, particularly for new buildings. These mandates should lead to near-zero net energy for all new construction by 2020 for single-family and low-rise residential buildings and

2030 for high-rise residential and nonresidential buildings. Because there are a lot of variables that could affect the amount of criteria pollutant emissions generated by an individual project, the BAAQMD's conservative screening criteria are an effective means of identifying projects that may require additional analysis.

For projects that would exceed BAAQMD's operational screening criteria (Table V.C-5, as updated by the BAAQMD), the following mitigation measure is applicable.

Mitigation Measure AIR-1: Reduce Operational Emissions. Proposed projects that would exceed the current BAAQMD's screening criteria for operational criteria air pollutant emissions shall retain a qualified air quality consultant to quantify criteria air pollutant emissions and identify measures, as needed, to reduce the project's average daily emissions below 54 pounds per day for ROG, NO_x, and PM_{2.5} and 82 pounds per day for PM₁₀, and reduce the maximum annual emissions below 10 tons per year for ROG, NO_x, and PM_{2.5} and 15 tons per year for PM₁₀. 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. Such measures may include, but are not limited to, the following:

- For any proposed refrigerated warehouses or large (greater than 20,000 square feet) grocery retailers, provide electrical hook-ups for diesel trucks with Transportation Refrigeration Units at the loading docks.
- Use low- and super-compliant VOC architectural coatings in building construction and when maintaining buildings. "Low-VOC" refers to paints that meet the more stringent regulatory limits in South Coast Air Quality Management District Rule 1113; however, many manufacturers have reformulated to levels well below these limits. These are referred to as "Super-Compliant" architectural coatings.
- Other measures that are shown to effectively reduce criteria air pollutant emissions on-site or off-site if emissions reductions are realized within the SFBAAB. Measures to reduce emissions on-site are preferable to off-site emissions reductions.

The feasibility or effectiveness of Mitigation Measure AIR-1 is unknown at this time. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be conservatively significant and unavoidable with mitigation. It should be noted that the identification of this significant impact does not preclude the finding of future less-than-significant impacts for subsequent projects that comply with applicable screening criteria or meet the City's significance thresholds for operational emissions of criteria air pollutants. (S)

(5) Project-Level Local Carbon Monoxide Concentrations (Criterion 7)

Vehicle trips generated by future development projects in the Plan Area could increase localized CO concentrations (also known as hotspots), which could affect sensitive receptors in the local community. The source of local CO concentrations is often associated with heavy traffic congestion, which most frequently occurs at signalized intersections of high-volume roadways. The City's significance threshold for local CO concentrations is equivalent to the 1- and 8-hour CAAQS of 20.0 ppm and 9.0 ppm, respectively, because these represent levels that are protective of public health. As described above, the City recommends using the BAAQMD's screening criteria to evaluate potential impacts related to localized CO concentrations.

The Alameda County Transportation Commission (ACTC) serves as the County Congestion Management Agency. The ACTC updates the County's Congestion Management Program (CMP) every two years to assess, monitor, and improve the performance of the County's multimodal transportation system and strengthen the integration of transportation and land use planning. As described in *Section V.B, Traffic and Transportation*, future development projects in the Plan Area would have a less-than-significant impact on regional VMT for the residential, office, and retail portions of future development in the Plan Area. As a result, future development projects in the Plan Area are considered consistent with the current CMP.

Build out of the Plan Area in 2040 would increase the maximum peak-hour traffic volume from about 5,000 to 6,000 vehicles per hour along major roadway segments and from about 12,100 to 12,200 vehicles per hour along freeway segments.²¹ This is well below the BAAQMD's screening criteria of 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to project-level local carbon monoxide concentrations.

d. Cumulative Air Quality Impacts

The cumulative impacts related to development of the Plan Area are described below.

(1) Criteria Pollutants

According to the BAAQMD, regional air pollution is largely a cumulative impact. No single project is sufficient in size to independently create regional nonattainment of ambient air quality standards. If a project does not exceed the thresholds of significance adopted by the City, its

²¹ Fehr & Peers, 2019. Peak hour traffic volume forecasts for the Downtown Oakland Specific Plan provided to Baseline Environmental Consulting.

emissions would not be considered cumulatively considerable, resulting in a less-than-significant cumulative air quality impact relative to existing conditions.

As described above, because the plan would be consistent with the 2017 CAP, emissions of criteria air pollutants would not result in a cumulatively significant impact at the plan level. In addition, criteria air pollutant emissions from construction of future development projects in the Plan Area would not result in a cumulatively significant impact because SCA-AIR-1, Dust Controls – Construction Related (#21) and SCA-AIR-2, Criteria Air Pollutant Controls – Construction Related (#22) would be incorporated as part of the Specific Plan and adopted as conditions of approval.

Future development projects in the Plan Area that exceed BAAQMD's operational screening criteria (Table V.C-5, as updated by the BAAQMD), could potentially generate criteria air pollutants that exceed the City's thresholds of significance and result in a cumulatively considerable net increase of criteria air pollutants for which the region is in nonattainment. Implementation of the Mitigation Measure AIR-1 would reduce criteria air pollutant emissions related to a project, but the feasibility or effectiveness of the mitigation measure is unknown at this time. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be cumulatively significant and unavoidable related to the cumulative air quality impacts of criteria pollutants.

(2) Toxic Air Contaminants

The BAAQMD's plan- and project-level cumulative thresholds of significance for TACs have been adopted by the City of Oakland and incorporated into their significance criteria. The BAAQMD's *Planning Healthy Places* map of local air pollution (Figure V.C-1, as updated by BAAQMD) and the City's SCAs related to TACs and PM_{2.5} emissions function as an overlay zone with specific requirements to reduce the generation TACs and PM_{2.5}, as well as the exposure of existing and future sensitive receptors to substantial concentrations of TACs and PM_{2.5}. SCA-AIR-3, Diesel Particulate Matter Controls – Construction Related (#23 TDM), SCA-AIR-4, Exposure to Air Pollution (Toxic Air Contaminants) (#24), SCA-AIR-5, Stationary Sources of Air Pollution (Toxic Air Contaminants) (#25), SCA-AIR-6, Truck-Related Risk Reduction Measures (Toxic Air Contaminants) (#26), and SCA-AIR-7, Asbestos in Structures (#27), would be incorporated as part of the Specific Plan, adopted as conditions of approval, and required, as applicable, of the development under the Specific Plan. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the cumulative air quality impacts of toxic air contaminants.

(3) Carbon Monoxide

According to the BAAQMD, a project's contribution to local CO concentrations is considered a cumulative impact. As described above, CO emissions from future development projects in the Plan Area would not result in a cumulatively significant impact because future development projects would comply with the BAAQMD's screening criteria for evaluating the significance of CO impacts. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the cumulative air quality impacts of carbon monoxide.

(4) Odors

As described above, future sources of potential odors in the Plan Area would generally be limited to a few light industrial developments, if any, and restaurants. These potential odor sources are generally consistent with existing odor sources in the Plan Area. According to the BAAQMD, existing odor sources in the Plan Area have not generated a substantial number of odor complaints in recent years. Therefore, future sources of potential odors in the Plan Area are unlikely to generate a substantial number of complaints, if any. Given that no major new odor sources (e.g., waste water treatment, chemical manufacturing, or smelting plants) that could generate a substantial number of complaints are expected to be developed in the Plan Area, as well as the odor limitations enforced by the BAAQMD under Regulation 7, a cumulative impact related to odor problems is not anticipated to occur. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the cumulative air quality impacts of odors.

D. GREENHOUSE GAS EMISSIONS

This section describes the existing greenhouse gas (GHG) conditions in the Downtown Oakland Specific Plan Area and its vicinity; discusses the regulations and policies pertinent to GHGs; and assesses the potentially significant impacts to the environment that could result from implementation of the Specific Plan and its associated development. Existing City policies and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified.

The analysis in this section was prepared in accordance with the Bay Area Air Quality Management District (BAAQMD) CEQA Air Quality Guidelines.¹

1. Setting

The following discussion provides an overview of the environmental setting regarding climate change and GHG emissions, existing GHG emissions and projections, and effects of GHG emissions.

a. Climate Change and GHG Emissions

Climate change refers to change in the Earth's weather patterns, including the rise in temperature due to an increase in heat-trapping GHGs in the atmosphere. Existing GHGs allow about two-thirds of the visible and ultraviolet light from the sun to pass through the atmosphere and be absorbed by the Earth's surface. The surface radiates this absorbed thermal energy back to space at longer wavelengths primarily in the infrared part of the spectrum. Much of the thermal radiation emitted from the surface is absorbed by the GHGs in the atmosphere and is re-radiated in all directions. Since part of the re-radiation is directed toward the surface and the lower atmosphere, the global surface temperatures are elevated above what they would be in the absence of GHGs. This process of trapping heat in the lower atmosphere is known as the greenhouse effect.

An increase of GHGs in the atmosphere affects the energy balance of the Earth and results in a global warming trend. Increases in global average temperatures have been observed since the mid-20th century and have been linked to observed increases in GHG emissions from anthropogenic sources. The primary GHG emissions of concern are carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). Other GHGs of concern include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆), but their contribution to climate change is less than 1 percent of the total GHGs that are well-mixed (i.e., that have atmospheric

¹ Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, May.

lifetimes long enough to be homogeneously mixed in the troposphere).² Each GHG has a different global warming potential. For instance, CH₄ traps about 21 times more heat per molecule than CO₂. As a result, emissions of GHGs are reported in metric tons of carbon dioxide equivalents (CO₂e), wherein each GHG is weighted by its global warming potential relative to CO₂.

The atmospheric concentrations of CO₂, CH₄, and N₂O have increased to levels unprecedented in at least the last 800,000 years due to anthropogenic sources. In 2010, the concentrations of CO₂, CH₄, and N₂O exceeded the pre-industrial era (before 1750) by about 39, 158, and 18 percent, respectively.³ The Earth's mean surface temperature in the Northern Hemisphere from 1983 to 2012 was likely the warmest 30-year period over the last 1,400 years.⁴ Earth's global surface temperatures in 2018 were the fourth warmest since 1880, which was behind those of 2016, 2017 and 2015. The past five years from 2014 to 2018 are collectively the warmest years in the modern record.⁵

The global increases in CO₂ concentrations are due primarily to fossil fuel combustion, cement production, and land use change (e.g., deforestation). The dominant anthropogenic sources of CH₄ are from ruminant livestock, fossil fuel extraction and use, rice paddy agriculture, and landfills, while the dominant anthropogenic sources of N₂O are from ammonia for fertilizer and industry.⁶ All emissions of HFCs, PFCs, and SF₆ are not naturally occurring and originate from industrial processes such as semiconductor manufacturing, use as refrigerants and other products, and electric power transmission and distribution.⁷

b. Existing GHG Emissions and Projections

In 2016, the California Air Resources Board (CARB) estimated that transportation was responsible for about 39 percent of California's GHG emissions, followed by industrial sources at about 21

² Intergovernmental Panel on Climate Change (IPCC), 2013. Climate Change 2013; the Physical Science Basis; Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

³ Bay Area Air Quality Management District (BAAQMD), 2015. Bay Area Emissions Inventory Summary Report: Greenhouse Gases, Base Year 2011, January.

⁴ Intergovernmental Panel on Climate Change (IPCC), 2013. Climate Change 2013; the Physical Science Basis; Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

⁵ National Aeronautics and Space Administration (NASA), 2019. 2018 Fourth Warmest Year in Continued Warming Trend, According to NASA, NOAA, February 6. Available at: <https://www.giss.nasa.gov/research/news/20190206/>.

⁶ Intergovernmental Panel on Climate Change (IPCC), 2013. Climate Change 2013; the Physical Science Basis; Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

⁷ Bay Area Air Quality Management District (BAAQMD), 2015. Bay Area Emissions Inventory Summary Report: Greenhouse Gases, Base Year 2011, January.

percent and electrical power generation at about 16 percent.⁸ In 2015, 85 million metric tons of CO₂e were emitted from anthropogenic sources within the San Francisco Bay Area Air Basin (SFBAAB). Emissions of CO₂ dominate the GHG inventory in the SFBAAB, accounting for about 90 percent of the total CO₂e emissions reported.⁹ The 2015 GHG emissions in the SFBAAB are summarized in Table V.D-1.

TABLE V.D-1 SAN FRANCISCO BAY AREA 2011 GHG EMISSIONS INVENTORY

Pollutant	Percent	CO ₂ e (Million Metric Ton/Year)
CO ₂	90	76.5
CH ₄	4	3.4
N ₂ O	2	1.7
HFC, PFC, SF ₆	4	3.4
Total	100	85

Source: Bay Area Air Quality Management District (BAAQMD), 2017. Final 2017 Clean Air Plan. April 19.

The City of Oakland's (City's) GHG emissions inventories for 2005, 2010, 2013, and 2015 are summarized in Table V.D-2 for various land-use sectors. As indicated in Table V.D-2, the greatest sources of GHG emissions in the City are from the On-Road Vehicles (includes highways and public roads) and Buildings and Energy Use sectors. The 2015 GHG emissions decreased for each land-use sector compared to 2005 and the overall GHG emissions decreased by 16.4 percent during this same time period. The largest overall reductions for GHG emissions over this same period were from the Buildings and Energy Use (6.7 percent) and Port of Oakland (5.6 percent) land-use sectors. These GHG reductions are the result of statewide and local efforts to reduce GHG emissions, as discussed under the Regulatory Setting section below.

c. Effects of GHG Emissions

According to the BAAQMD, some of the potential effects of increased GHG emissions and the associated climate change may include loss in snow pack (affecting water supply), sea level rise, more frequent extreme weather events, more large forest fires, and more drought years. In addition, climate change may increase electricity demand for cooling, decrease the availability of hydroelectric power, and affect regional air quality and public health.¹⁰

⁸ California Air Resources Board (CARB), 2018. California Greenhouse Gas Emissions for 2000 to 2016 – Trends of Emissions and Other Indicators, July 11.

⁹ Bay Area Air Quality Management District (BAAQMD), 2017. Final 2017 Clean Air Plan, April 19.

¹⁰ Ibid.

TABLE V.D-2 CITY OF OAKLAND GHG EMISSION TRENDS (METRIC TONS CO₂E)

Category	2005	2010	2013	2015	Net Reduction ^a	Overall Net Reduction ^b
Buildings & Energy Use	1,034,747	1,010,526	956,096	833,582	201,165	6.7%
Airport	146,618	76,781	78,270	83,348	63,270	2.1%
Public Transit	39,652	37,917	36,113	39,302	350	<0.1%
On-Road Vehicles	1,405,930	1,254,156	1,369,958	1,374,225	31,705	1.1%
Port of Oakland	235,000	235,000	68,240	68,240	166,760	5.6%
Materials Use & Waste	82,977	65,898	63,205	64,727	18,250	0.6%
City Government	42,745	37,632	35,011	33,664	9,081	0.3%
Total	2,987,669	2,717,910	2,606,893	2,497,088	490,581	16.4%

Note: Lifecycle emissions associated with the production, use, and disposal of products and services are not included.

^a Net Reduction = 2015 emissions - 2005 emissions.

^b Overall Net Reduction = (2015 emissions - 2005 emissions) / Total 2005 emissions.

Source: City of Oakland, 2018. 2015 Greenhouse Gas Emissions Inventory Report, March.

2. Regulatory Setting

This subsection discusses applicable regulatory provisions, including federal, State, and regional regulations, and policies from the BAAQMD's Climate Protection Program, 2017 Clean Air Plan, City of Oakland's Energy and Climate Action Plan, Green Building Ordinance, Plug-in Electric Vehicle Charging Stations, Waste Reduction and Recycling, General Plan, Municipal Code, and Standard Conditions of Approval (SCAs).

a. Federal Regulations

The United States (U.S.) participates in the United Nations Framework Convention on Climate Change. In 1998 under the Clinton administration, the U.S. signed the Kyoto Protocol, which would have required reductions in GHGs; however, the protocol did not become binding in the U.S. as it was never ratified by Congress. Instead, the federal government chose voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science. In 2002, the U.S. announced a strategy to reduce the GHG intensity of the American economy by 18 percent over a 10-year period from 2002 to 2012. In 2015, the U.S. submitted its "intended nationally determined contribution" to the framework convention, which targets to cut net GHG emissions by 26 to 28 percent below 2005 levels by 2025.

The U.S. Environmental Protection Agency (EPA) is responsible for enforcing the federal Clean Air Act and the 1990 amendments to it. On April 2, 2007, the U.S. Supreme Court ruled that CO₂

is an air pollutant as defined under the Clean Air Act, and that the EPA has the authority to regulate emissions of GHGs.¹¹ The EPA made two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act, as follows:

- **Endangerment Finding:** The current and projected concentrations of the six key well-mixed GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, they were a prerequisite for implementing GHG emissions standards for vehicles. In May 2010, the EPA in collaboration with the National Highway Traffic Safety Administration (NHTSA) finalized national GHG emission and fuel economy standards for light-duty vehicles for the model years 2012 to 2016. These standards were consistent with the standards adopted by California under the Pavley Regulations, described below.¹² In August 2012, EPA and NHTSA extended the national GHG emission and fuel economy standards for light-duty vehicles for the model years 2017 to 2025. Combined with the 2012 to 2016 standards, the regulation will result in vehicles emitting 50 percent less than 2010 levels in 2025.¹³

In August 2016, EPA and NHTSA finalized national GHG emission and fuel economy standards for medium- and heavy-duty vehicles that would cover model years 2018 to 2027 for certain trailers and model years 2021 to 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks.

b. State Regulations and Policies

(1) Pavley Regulations – Assembly Bill 1493

In 2002, the California Legislature adopted Assembly Bill (AB) 1493, referred to as the “Pavley regulations,” which required CARB to develop and adopt regulations that achieve the maximum feasible and cost-effective reductions in GHG emissions from new passenger vehicles. To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations in 2004 that added GHG emissions standards to California’s existing standards for motor vehicle

¹¹ Massachusetts, et al. v. U.S. Env’tl. Prot. Agency, et al. (2007) 549 U.S. 497.

¹² U.S. Environmental Protection Agency (EPA), 2010. Regulatory Announcement: EPA and NHTSA Finalize Historic National Program to Reduce Greenhouse Gases and Improve Fuel Economy for Cars and Trucks.

¹³ U.S. Environmental Protection Agency (EPA), 2012. Regulatory Announcement: EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks, August.

emissions. In 2009, CARB adopted amendments to the Pavley regulations that reduce allowed GHG emissions from new passenger vehicles by 30 percent from 2009 through 2016. Upon adoption of federal greenhouse gas standards by the EPA and NHTSA that preserved the benefits of the Pavley regulations, the Pavley regulations were revised to accept compliance with the federal standards as compliance with California's standards in the 2012 through 2016 model years. Current regulations governing GHG emission and fuel economy standards are described below.

(2) Advanced Clean Cars Program

On August 7, 2012, CARB adopted a set of regulations to control emissions from passenger vehicles, collectively called Advanced Clean Cars. This program was developed in coordination with EPA and NHTSA in order to control the emission of smog-causing criteria pollutants and GHG emissions.¹⁴ In California, the standards are promulgated as a single coordinated package of regulations that govern standards for criteria pollutant and GHG emissions and establish a technology mandate for zero-emission vehicles. The criteria pollutant and GHG emissions standards are consistent with the current EPA and NHTSA standards described above and are in effect an extension of the Pavley regulations beyond 2016. The zero-emission vehicle regulation is designed to achieve the State's long-term emission reduction goals by requiring auto manufacturers to offer specific numbers of these cars available for sale.

(3) Renewable Portfolio Standard – Senate Bills 1078, 107, X1-2, 350, and 100

In 2002, under Senate Bill (SB) 1078, the State enacted the Renewable Portfolio Standard (RPS) program, which aims to increase the percentage of renewable energy in California's electricity mix to 20 percent of retail sales by 2017. The RPS timeline was accelerated in 2006 under SB 107 and expanded in 2011, 2015, and 2018 under SB X1-2, SB 350, and SB 100, respectively. The RPS program currently requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent by 2020 and 60 percent by 2030. In addition, SB 100 sets a planning goal that 100 percent of total retail sales of electricity in California come from eligible renewable energy resources and zero-carbon resources by December 31, 2045.

¹⁴ California Air Resources Board (CARB), 2019. Advanced Clean Cars Program: About, webpage. Available at: <https://ww2.arb.ca.gov/index.php/our-work/programs/advanced-clean-cars-program/about>, accessed April 15, 2019.

(4) Executive Order S-3-05

In 2005, Governor Schwarzenegger issued Executive Order S-3-05, which states that California is vulnerable to the effects of climate change, including reduced snowpack in the Sierra Nevada Mountains, exacerbation of California's existing air quality problems, and sea level rise. To address these concerns, the executive order established the following statewide GHG emissions reduction targets:

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

It should be noted that executive orders are legally binding only on State agencies and have no direct effect on local government or the private sector.

(5) California Global Warming Solutions Act of 2006 – AB 32

In 2006, Governor Schwarzenegger signed AB 32, the California Global Warming Solutions Act, which requires California to reduce statewide GHG emissions to 1990 levels by 2020. In December 2008, CARB adopted the Scoping Plan, which outlines a statewide strategy to achieve AB 32 goals. At the regional level, in response to SB 375 (see below), the Association of Bay Area Governments has adopted a Sustainable Communities Strategy (SCS) to integrate land use and transportation planning in order to reduce future motor vehicle travel and decrease GHG emissions. In addition, the BAAQMD is implementing a wide range of programs that promote energy efficiency, reduce vehicle miles traveled (VMTs), and develop alternative sources of energy.

(6) Low-Carbon Fuel Standard – Executive Order S-1-07

In 2007, Governor Schwarzenegger issued Executive Order S-1-07 to enact the low-carbon fuel standard (LCFS). The LCFS calls for a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. It also directed the CARB to determine whether this low-carbon fuel standard could be adopted as a discrete early-action measure under AB 32. CARB adopted the Low Carbon Fuel Standard on April 23, 2009 and amended it on January 4, 2019 in order to support the 2030 GHG emissions targets enacted through SB 32 (as discussed further below). The amended standard requires a 20 percent reduction in the carbon intensity of California's transportation fuels by 2030.

(7) CEQA and SB 97

In 2007, under SB 97, the State acknowledged that climate change is a prominent environmental issue requiring analysis under CEQA. SB 97 directed the Governor's Office of Planning and

Research to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA. In 2009, the Natural Resources Agency adopted the State CEQA Guidelines amendments, which provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The amendments became effective in March 2010. The amendments added Sections 15126.4(c) and 15064.4 (discussed further below) to the BAAQMD CEQA Guidelines, which specifically pertain to the significance of GHG emissions and provide guidance on measures to mitigate GHG emissions when such emissions are found to be significant.

(8) Sustainable Communities Strategy – SB 375

In 2008, Governor Schwarzenegger signed SB 375, which aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations to reduce vehicle emissions and help California meet the GHG reduction goals established in AB 32. Under SB 375, metropolitan planning organizations are required to incorporate an SCS into their Regional Transportation Plan. The goal of the SCS is to reduce regional VMTs and associated GHG emissions through land use planning strategies, such as promoting compact, mixed-use commercial and residential development near public transportation hubs. In accordance with SB 375, the Metropolitan Transportation Commission has incorporated the SCS into their current Regional Transportation Plan, Plan Bay Area 2040.¹⁵ SB 375 also provides incentives to developers through CEQA streamlining to encourage projects that are consistent with applicable regional plans, and which achieve GHG emissions reduction targets.

(9) Executive Order B-30-15 and SB 32

In 2015, Governor Brown issued Executive Order B-30-15, which set a statewide GHG emissions reduction target of 40 percent below 1990 levels by 2030. This target is in addition to the previous GHG emissions reduction targets established in Executive Order S-3-05 for 2010, 2020, and 2050. In September 2016, Governor Brown signed SB 32, which codifies the GHG emissions reduction target in Executive Order B-30-15.

As required by Executive Order B-30-15 and SB 32, CARB updated the Scoping Plan to identify measures to meet the 2030 target. The revised scoping plan was adopted December 14, 2017 and builds upon the initial scoping plan initiatives used for achieving 2020 targets, such as implementation of SCSs, LCFS, and RPS. Policies target building efficiency; renewable power

¹⁵ Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2017. Plan Bay Area 2040. Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2017–2040. Adopted July 26.

investment; clean and renewable fuels; vehicle emissions; walkable/bikeable communities with transit; cleaner freight and goods movement; reducing pollutants from dairies, landfills, and refrigerants; and capping emission from transportation, industry, natural gas, and electricity sources.

(10) SB 743

SB 743 changes the way that public agencies must evaluate the transportation impacts of projects under CEQA. The bill required revisions to the CEQA Guidelines that would establish new criteria for determining the significance of a project's transportation impacts that will more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions.

As required under SB 743, the Governor's Office of Planning and Research (OPR) developed potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled (VMT), VMT per capita, automobile trip generation rates, or automobile trips generated. The new metric would replace the use of automobile delay and level of service (LOS) as the metric to analyze transportation impacts under CEQA. OPR recommends different thresholds of significance for projects depending on land use types. For example, residential and office space projects must demonstrate a VMT level that is 15 percent less than that of existing development to determine whether the mobile-source GHG emissions associated with the project are consistent with statewide GHG reduction targets. With respect to retail land uses, any net increase of VMT may be sufficient to indicate a significant transportation impact.

(11) Title 24 Building Efficiency Standards

The State regulates energy consumption under Title 24 Building Standards Code, Part 6 of the California Code of Regulations (also known as the California Energy Code). The Title 24 Building Energy Efficiency Standards were developed by the California Energy Commission and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and nonresidential buildings. The California Energy Code is updated every three years, with the most recent iteration (2016) effective as of January 1, 2017, and the next version (2019) planned to go into effect on January 1, 2020. The California Energy Commission's long-term vision is that future updates to the California Energy Code will support zero-net energy for all new single-family and low-rise residential buildings by 2020 and new high-rise residential and nonresidential buildings by 2030.

(12) Title 24 California Green Building Standards Code

Title 24 Building Standards Code, Part 11 of the California Code of Regulations is referred to as the California Green Building Standards Code (CALGreen Code). The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories:

(1) planning and design; (2) energy efficiency; (3) water efficiency and conservation; (4) material conservation and resource efficiency; and (5) environmental air quality.

c. Local Regulations

(1) BAAQMD Climate Protection Program

The BAAQMD is the regional government agency that regulates sources of air pollution within the nine Bay Area counties. The BAAQMD established a climate protection program to reduce pollutants that contribute to global climate change and affect air quality in the SFBAAB. The climate protection program includes measures that promote energy efficiency, reduce VMTs, and develop alternative sources of energy, all of which assist in reducing emissions of GHGs and in reducing air pollutants that affect the health of residents. The BAAQMD also seeks to support current climate protection programs in the region and to stimulate additional efforts through public education and outreach, technical assistance to local governments and other interested parties, and promotion of collaborative efforts among stakeholders.

(2) BAAQMD 2017 Clean Air Plan

The BAAQMD and other air districts prepare clean air plans in accordance with the State and federal Clean Air Acts. In April 2017, the BAAQMD adopted the 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 CAP), which is a comprehensive plan to improve Bay Area air quality and protect public health through implementation of a control strategy designed to reduce emissions and ambient concentrations of harmful pollutants. The 2017 CAP also includes measures designed to reduce GHG emissions.

(3) City of Oakland Energy and Climate Action Plan

In December 2012, the City adopted the Energy and Climate Action Plan (ECAP).¹⁶ The purpose of the ECAP is to identify and prioritize actions for reducing energy consumption and GHG emissions associated with the City. The ECAP includes more than 150 actions to enable the City

¹⁶ City of Oakland, 2012. Energy and Climate Action Plan, December 4. Updated March 2018.

to reduce GHG emissions to 36 percent below 2005 levels by 2020 and 83 percent below 2005 levels by 2050. These goals were established to align with the Intergovernmental Panel on Climate Change's Fourth Assessment Report, which recommended that industrialized countries such as the U.S. reduce GHG emissions 25 to 40 percent below 1990 levels by 2020 and 80 to 95 percent below 1990 levels by 2050 in order to achieve a level of climate stabilization that includes relatively minor consequences.

The City plans to accomplish the 2020 GHG-reduction goal through the following:

- 20-percent reduction in VMTs annually as residents, workers, and visitors meet daily needs by walking, bicycling, and using transit
- 24 million gallons of oil saved annually due to less driving and more fuel-efficient vehicles on local roads
- 32-percent decrease in electricity consumption through renewable generation, conservation, and energy efficiency
- 14-percent decrease in natural gas consumption through building retrofits, solar hot water projects, and conservation
- 62 million kilowatt-hours and 2.7 million therms annually of new renewable energy used to meet local needs
- 375,000 tons of waste diverted away from local landfills through waste reduction, reuse, recycling, and composting

In March 2018, the City updated the ECAP to reprioritize existing action items and include the most recent GHG emissions inventory.

On May 15, 2018, the City passed Resolution No. 87189 to adopt an interim GHG reduction goal of 56 percent below 2005 levels by 2030. The City has conducted an in-depth GHG analysis using the Climate Action for Urban Sustainability (CURB) planning tool to help identify critical actions needed for the City to achieve their long-term GHG reduction goals for 2030 and 2050.¹⁷ These actions will be outlined and prioritized in the next update to the ECAP, which will be adopted in 2020.

(4) City of Oakland Green Building Ordinance

In October 2010, the City adopted the Green Building Ordinance for Private Development Projects. This ordinance affects a wide range of projects, including new residential, non-

¹⁷ Bloomberg Associates, 2018. Pathways to Deep GHG Reductions in Oakland: Final Report, March.

residential, and mixed-use developments. The minimum green building requirements described in the ordinance are designed to reduce energy use, conserve water and other natural resources, limit solid waste during construction and operation, and promote healthy indoor air quality. Requirements from both the City's local ordinance and the State's CALGreen code apply to future City developments.

(5) City of Oakland Plug-in Electric Vehicle Charging Stations

As of March 2017, Chapter 15.04, Part 11 of the City's Municipal Code requires all new multi-family 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.

(6) City of Oakland Waste Reduction and Recycling

Chapter 15.34 of the City's Municipal Code requires new construction projects to submit a Waste Reduction and Recycling Plan to the City's Building Official for review and approval. The intent of the provisions is to divert (e.g., reuse on-site) at least 50 percent of construction and demolition debris from landfills. These requirements are designed to meet and further the goals of the California Integrated Waste Management Act of 1989 (AB 939) and the Alameda County Waste Reduction and Recycling Act of 1990 (Measure D).

According to the California Department of Resources Recycling and Recovery (CalRecycle), the annual average amount of waste generated in the City of Oakland between 2013 and 2017 was approximately 874,000 tons per year.¹⁸ Under CalRecycle's formulation, about 32 percent of the annual average waste generated (282,000 tons) was sent to landfills and the other 68 percent (592,000 tons) was diverted from landfills (e.g., recycled), which exceeds the State's mandate on local jurisdictions to divert 50 percent of waste from landfills by 2000 under AB 939. The current statewide goal under AB 341 is that at least 75 percent of waste generated should be source reduced, recycled, or composted by 2020; however, this policy goal does not establish a new waste diversion mandate on local jurisdictions. In March 2006 the Oakland City Council adopted a Zero Waste Goal for 2020 to reduce the City's reduce landfill tonnage to 40,000 tons per year. In December 2006, the City passed a resolution adopting a Zero Waste Strategic Plan. The Zero Waste Strategic Plan provides a framework of policies and initiatives that guide the planning and

¹⁸ CalRecycle, 2019. Jurisdiction Diversion/Disposal Rate Summary. <https://www.calrecycle.ca.gov/LGCentral/DataTools/Reports/DivDispRtSum>, accessed June 26, 2019.

decision-making process to achieve the City's Zero Waste Goal. The City's current ECAP update outlines policies and actions to reduce GHG emissions associated with material consumption and waste. While the City far exceeds current and anticipated State mandates, it is not projected to meet its Zero Waste Goal by 2020.

(7) General Plan

The following policies from the City of Oakland General Plan would relate to the GHG emissions.

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 N3.2: Promoting Strategies to Address Congestion. 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 of Oakland.

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-13.3: 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.

(8) Standard Conditions of Approval

The City of Oakland Uniformly Applied Development Standards would be incorporated into the project as Standard Conditions of Approval (SCAs). The following SCAs would apply to future projects in the Plan Area.

SCA-GHG-1: Greenhouse Gas (GHG) Reduction Plan (#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 requirement for a Greenhouse Gas Reduction Plan, would apply under any of the following scenarios:

Scenario A: Projects which (a) involve a land use development (i.e., a project that does not require a permit from the Bay Area Air Quality Management District (BAAQMD) to operate), (b) exceed the greenhouse gas (GHG) emissions screening criteria contained in the BAAQMD CEQA Guidelines,¹⁹ AND (c) after a GHG analysis is prepared would produce total GHG emissions of more than 1,100 metric tons of CO₂e annually AND more than 4.6 metric tons of CO₂e per service population annually (with "service population" defined as the total number of employees and residents of the project).

Scenario B: Projects which (a) involve a land use development, (b) exceed the GHG emissions screening criteria contained in the BAAQMD CEQA Guidelines,²⁰ (c) after a GHG analysis is prepared would exceed at least one of the BAAQMD Thresholds of Significance (more than 1,100 metric tons of CO₂e annually OR more than 4.6 metric tons of CO₂e per service population annually), AND (d) are considered to be "Very Large Projects."²¹

¹⁹ For residential development projects, refer to the City's Housing Element EIR screening criteria. The Housing Element EIR's analysis showed that residential development projects of less than 172 units would not result in a significant climate change impact and, therefore, no project-specific GHG analysis is required for such projects. Under an alternative approach in the Housing Element EIR, the analysis found that **ANY** residential development project (including those containing 172 or more units) would not result in a significant climate change impact and that no project-specific GHG analysis would be required. For residential projects containing 172 or more units, please consult with City Planning staff and the City Attorney's office on the appropriate GHG review. For nonresidential development projects and mixed-use development projects, the nonresidential component of the project must be compared to the BAAQMD screening criteria and the applicable threshold if the screening criteria are exceeded, independently from any residential component the project.

²⁰ See footnote #19 above.

²¹ A "Very Large Project" is defined as any of the following:

- (A) Residential development of more than 500 dwelling units;
- (B) Shopping center or business establishment employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space;
- (C) Commercial office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space;
- (D) Hotel/motel development of more than 500 rooms;

Scenario C: Projects which (a) involve a stationary source of GHG (i.e., a project that requires a permit from BAAQMD to operate) AND (b) after a GHG analysis is prepared would produce total GHG emissions of more than 10,000 metric tons of CO₂e annually.

The goal of the GHG Reduction Plan shall be to increase energy efficiency and reduce GHG emissions to below [INCLUDE THIS LANGUAGE IF SCENARIO A OR B:] at least one of the Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance (1,100 metric tons of CO₂e per year or 4.6 metric tons of CO₂e per year per service population) [INCLUDE THIS LANGUAGE IF SCENARIO C:] the Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance (10,000 metric tons of CO₂e per year) [INCLUDE THIS LANGUAGE IF SCENARIO B] AND to reduce GHG emissions by 36 percent below the project's 2005 "business-as-usual" baseline GHG emissions (as explained below) to help implement the City's Energy and Climate Action Plan (adopted in 2012) which calls for reducing GHG emissions by 36 percent below 2005 levels. The GHG Reduction Plan shall include, at a minimum, (a) a detailed GHG emissions inventory for the project under a "business-as-usual" scenario with no consideration of project design features, or other energy efficiencies, (b) an "adjusted" baseline GHG emissions inventory for the project, taking into consideration energy efficiencies included as part of the project (including the City's Standard Conditions of Approval, proposed mitigation measures, project design features, and other City requirements), and additional GHG reduction measures available to further reduce GHG emissions, and (c) 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 GHG reduction measures to be considered include, but are not be limited to, measures recommended in BAAQMD's latest CEQA 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; (4) off-site within the State of California; then (5) elsewhere in the United States.

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; (3) within the State of California; then (4) elsewhere in the United States. The cost of carbon credit purchases shall be based on

(E) Industrial, manufacturing, processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or encompassing more than 650,000 square feet of floor area; or

(F) Any combination of smaller versions of the above that when combined result in equivalent annual GHG emissions as the above.

current market value at the time purchased and shall be based on the project's operational emissions estimated in the GHG Reduction Plan or subsequent approved emissions inventory, which may result in emissions that are higher or lower than those estimated in the GHG Reduction Plan.

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.

When Required: Prior to approval of construction-related permit.

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

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).

When Required: During construction

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

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 baseline emissions reported in the GHG Plan.

The GHG Reduction Plan shall be considered fully attained when project emissions are less than either applicable numeric BAAQMD CEQA Thresholds [INCLUDE THIS LANGUAGE IF SCENARIO B:] AND GHG emissions are 36 percent below the project's 2005 "business- as-usual" baseline GHG emissions, 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) or required percentage reduction from the "adjusted" baseline.

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 GHG Reduction 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.

When Required: Ongoing

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Planning

SCA-GHG-2: Transportation and Parking Demand Management (#79)

Prior to issuance of a final inspection of the building permit.

[See SCA-TRANS-5 in Section V.B, Traffic and Transportation]

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section describes environmental impacts related to GHG emissions that could result from implementation of the Specific Plan and reasonably foreseeable development expected to occur under the Plan. The section begins with the criteria of significance that establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would result in a significant greenhouse gas impact if it would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
2. Fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Analysis Approach

The BAAQMD has adopted and incorporated GHG thresholds of significance into their CEQA Guidelines²² to assist lead agencies in evaluating and mitigating air quality impacts under CEQA; the City has adopted these thresholds. The BAAQMD's thresholds were developed to evaluate whether land-use projects would comply with AB 32's statewide GHG reduction goal for 2020, which is to reduce GHG emissions to 1990 levels. The scientific soundness of the thresholds is

²² Bay Area Air Quality Management District (BAAQMD), 2017. California Environmental Quality Act Air Quality Guidelines, May.

supported by substantial evidence presented in the BAAQMD's Revised Draft Options and Justification Report.²³ The BAAQMD is in the process of updating their CEQA Guidelines to include revised significance thresholds to evaluate long-term GHG reduction goals beyond 2020.

Because the Specific Plan includes development through the horizon year 2040, the following long-term GHG reduction goals adopted by the City are considered in this Draft EIR²⁴:

1. 56 percent below 2005 levels by 2030; and
2. 83 percent below 2005 levels by 2050²⁵.

The City's 2030 GHG reduction goal is more aggressive than the statewide goal of reducing GHG emissions 40 percent below 1990 levels based on SB 32; therefore, a project that supports that City's 2030 GHG reduction goal would also support the statewide 2030 GHG reduction goal.

In the absence of an adopted ECAP update that is a certified Qualified GHG Reduction Plan (per CEQA Guidelines section 15183.5), interim project-specific thresholds of significance have been developed for this Draft EIR. While these interim thresholds can serve to evaluate the significance of GHG emissions from construction and operation of future development projects within the Plan Area, these significance thresholds do not necessarily set precedent for all future City projects.²⁶ The interim significance thresholds for future development projects in the Plan Area are described below.

(1) Source-Based Analysis of GHG Emissions

To evaluate the significance of GHG emissions from construction and operation of future development projects in the Plan Area, the following two-step approach was used in this Draft EIR:

1. Assess transportation-related GHG emissions using a combination of quantitative and qualitative targets; and

²³ Bay Area Air Quality Management District (BAAQMD), 2009. Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance, October.

²⁴ On May 15, 2018, the City passed Resolution No. 87189 to adopt an interim GHG reduction goal of 56 percent below 2005 levels by 2030.

²⁵ Resolution Approving Preliminary Planning Targets for Development of the Draft Oakland Energy and Climate Action Plan, City of Oakland, Public Works Agency, June 23, 2009.

²⁶ Project-specific thresholds are not required to be formally adopted because the requirement for formal adoption of thresholds under 14 Cal Code Regs Section 15064(b) applies only to thresholds of general application. In addition, a lead agency has discretion to accept a threshold of significance developed by the experts preparing the EIR (*Mount Shasta Bioregional Ecology Ctr. v County of Siskiyou* [2012] 2010 CA4th 184, 204) and the threshold of significance may be tailored to the project reviewed in the EIR (*Save Cuyama Valley v County of Santa Barbara* [2013] 2013 CA 4th 1059, 1068).

2. Assess non-transportation GHG emissions using an efficiency metric based on the City's adopted 2030 and 2050 targets for GHG emissions.

Determining the impacts of GHG emissions from transportation independently from other sectors is supported by the following organizations and documents:

- OPR Discussion Draft CEQA and Climate Change Advisory (December 2018).²⁷ This draft advisory recommends a route to streamlining project-level CEQA analysis of GHGs by separately assessing the impacts of transportation and building energy emissions: *"a land use development project that produces low vehicle miles traveled, achieves applicable building energy efficiency standards, uses no natural gas or other fossil fuels, and includes Energy Star appliances where available, may be able to demonstrate a less-than-significant greenhouse gas impact associated with project operation."* Further, the advisory states that projects that generate a 15-percent reduction in per-capita residential and per-employee office VMT and no increase in per employee retail VMT as compared to existing regional/citywide conditions *"may have a less-than significant impact both for transportation and the greenhouse gas emissions associated with transportation."*
- OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018). OPR recommends VMT-based targets support the State's GHG reduction goals as stipulated in SB 32 and the 2017 Scoping Plan: *"Based on OPR's extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the State's long-term climate goals, OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold Below these levels, a project could be considered low VMT and would, on that metric, be consistent with 2017 Scoping Plan Update assumptions that achieve climate state climate goals."*
- The Association of Environmental Professionals (AEP) Final Whitepaper Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California (October 2016).²⁸ This whitepaper identifies two hybrid concepts using SB 375 and SB 743 that each evaluate transportation GHG emissions separately from non-transportation GHG emissions as follows:
 - Hybrid SB 375 Concept: *"SB 375 relieves certain residential and mixed-use projects that are consistent with an approved RTP/SCS, from the requirement to consider the project's GHG*

²⁷ Governor's Office of Planning and Research (OPR), 2018. Discussion Draft: CEQA and Climate Change Advisory, December.

²⁸ Association of Environmental Professionals (AEP), 2015. Beyond 2020: The Challenge of Greenhouse Gas Reduction Planning by Local Governments in California, March 16. Draft whitepaper prepared by Climate Change Committee.

impacts from cars and light-duty truck trips on climate change or regional transportation networks. Such consistent projects, by statute, do not have significant impacts related to GHG emissions for passenger car and light-duty truck on-road emissions ... The relief under SB 375 could be combined with an efficiency threshold for the project's non- transportation emissions to provide coverage of all of the GHG emissions. The revised efficiency threshold could be derived in the same way as the efficiency threshold described above, but the on-road passenger car/light-duty truck transportation emissions would be excluded from the calculation if using the SB 375 hybrid concept."

- Hybrid SB 743 Concept: *"Since the VMT thresholds are being proposed based on GHG reduction needs overall, the VMT thresholds could be used to assess transportation GHG emissions, and then a revised GHG efficiency threshold could be used for the non-transportation emissions ... a project would first be evaluated for consistency with a SB 743 VMT threshold for on-road activities. Emissions not related to on-road vehicle trips could be compared to the GHG efficiency metric identified in the Technical Appendix. If the project exceeded either the SB 743 VMT threshold, or the revised emissions efficiency threshold that excludes on-road vehicle emissions, then GHG emissions would be determined to be significant."*
- The California Air Resources Board (CARB) Whitepaper 2017 Scoping Plan-Identified VMT Reductions And Relationship To State Climate Goals (January 2019).²⁹ CARB identified per-capita VMT reductions that would achieve State climate goals for 2030 and 2050: *"It is reasonable for new development to achieve a fair share of per capita VMT and GHG emissions reductions necessary to achieve statewide climate goals and to continue to work towards additional VMT and GHG emissions reductions through other measures ... Certain land use development projects located in areas that would produce rates of total VMT per capita that are approximately 14.3 percent lower than existing conditions, or rates of light-duty VMT per capita that are approximately 16.8 percent lower than existing conditions (either lower than the regional average or other appropriate planning context) could be, by virtue of their location and land use context, interpreted to be consistent with the transportation assumptions embedded in the 2017 Scoping Plan and with 2050 State climate goals."*

Transportation GHG Emissions Thresholds

As with the transportation analysis, the total VMT for the Plan Area in the horizon year 2040 will be compared quantitatively against the following per-capita VMT thresholds that have been recommended by OPR for SB 743 compliance:

²⁹ California Air Resources Board (CARB), 2019. California Air Resources Board 2017 Scoping Plan-Identified VMT Reductions and Relationship To State Climate Goals, January.

- **15 percent below existing regional VMT per capita for residential and commercial/office projects; and**
- **No net increase in total VMT for retail projects.**

In addition, the project will be qualitatively compared to transportation-related GHG reduction measures proposed in the City's recent CURB report,³⁰ which are expected to be incorporated into a future ECAP update.

Non-Transportation GHG Emissions Thresholds

All GHG emissions from non-transportation sectors proposed in the Plan Area (construction, building energy use, water, wastewater, solid waste) will be compared to an efficiency metric for the horizon year 2040. Efficiency thresholds are quantitative thresholds that are based on a measurement of GHG efficiency for a given project, regardless of the total amount of mass emissions. Projects that attain the efficiency target, with or without mitigation, would result in less than significant GHG emissions. The efficiency metric used in this analysis is based on the GHG emissions divided by the "service population" (SP), which is the sum of people who live (residents) and work (employees) in the Plan Area.

Because there is no GHG reduction goal adopted by the City for the horizon year 2040, an interim target that demonstrates substantial progress toward the City's 2050 goal can be used based on linear interpolation between the City's 2030 and 2050 goals: this target would be 69.5 percent below 2005 GHG levels. However, based on the City's most recent CURB report to support a future ECAP update, the City is considering a more aggressive interim GHG reduction target of 72 percent below 2005 levels by 2040; therefore, the City's more aggressive interim GHG reduction target was used for this analysis. Table V.D-3 summarizes the non-transportation GHG efficiency thresholds estimated for the City of Oakland.

As shown in Table V.D-3, an interim 2040 GHG efficiency threshold of 0.34 metric tons of carbon dioxide equivalent per service population (MTCO₂e /SP) will be used to evaluate non-transportation GHG emissions from future developments in the Plan Area. This threshold will be applied as follows: 1) sum amortized construction emissions (over 40 years) and annual non-transportation operational emissions at buildout in 2040; 2) divide this number by the total net increase in service population associated with the Plan Area at buildout in 2040 to determine the non-transportation GHG efficiency metric; 3) compare the resulting metric to the interim 2040 GHG efficiency threshold to determine the significance of the GHG emissions from future development projects in the Plan Area.

³⁰ Bloomberg Associates, 2018. Pathways to Deep GHG Reductions in Oakland: Final Report, March.

TABLE V.D-3 OAKLAND NON-TRANSPORTATION GHG EFFICIENCY THRESHOLDS

	2005 (Baseline Year)	2030 (Milestone Year)	2040 (Horizon Year)
Population	410,560	552,812	648,846
Employment	213,666	259,723	273,831
Service Population	624,226	812,535	922,677
GHG Reduction Goal	--	56%	72%
GHG Mass Emission Goals (MTCO ₂ e)	1,117,724	491,799	312,963
GHG Efficiency Threshold (MTCO₂e/SP)	1.79	0.61	0.34

Notes: MTCO₂e /SP= metric tons of carbon dioxide equivalent per service population; "--" = not applicable
Service population was estimated based on the projected population and employment reported by the Metropolitan Transportation Commission's Travel Demand Model³¹ for all Transportation Analysis Zones (TAZs) in the City of Oakland.

Source: The data from these TAZ support Plan Bay Area 2040.³² The baseline GHG emissions were based on the City's 2005 GHG Inventory³³ for building energy use, water and wastewater, and solid waste.

c. Project Analysis and Findings

Development under the Plan would facilitate new growth. The potential impacts that are identified are analyzed within the context of existing plans and policies, permitting requirements, local ordinances, and the City of Oakland's SCAs.

(1) GHG Emissions (Criterion 1)

Impacts of development under the plan related to transportation and non-transportation GHG emissions are described below.

Transportation GHG Emissions

Based on the Specific Plan's compliance with SB 743 and recommendations from the City's recent CURB report, transportation GHG emissions from buildout of the Plan Area in 2040 would result in a less-than-significant impact on the environment.

³¹ Metropolitan Transportation Commission (MTC), 2018. Open Date Catalog; Transportation Analysis Zones. Available at: <http://opendata.mtc.ca.gov/datasets/transportation-analysis-zones>. Last updated September 24.

³² Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG), 2017. Plan Bay Area 2040. Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2017–2040. Adopted July 26.

³³ City of Oakland, 2018. 2015 Greenhouse Gas Emissions Inventory Report, March.

As described in *Section V.B, Traffic and Transportation*, VMT generated by the Specific Plan would comply with SB 743 because:

- VMT would be lower than the existing regional averages for residential and commercial development minus 15 percent; and
- Citywide VMT per service population would remain the same for retail development.

In addition, with full development under the Specific Plan by 2040, VMT and associated air pollutant emissions would increase at a substantially lower rate than the population growth (see in *Section V.C, Air Quality*).

Based on the City's recent CURB report,³⁴ the following actions are recommended for the City to achieve the greatest GHG reductions related to transportation:

1. Significantly shift people away from private auto trips.
2. Accelerate the transition to use of electric vehicles.

As required by City of Oakland's SCA-TRANS-5: Transportation and Parking Demand Management (#79), each development project under the Specific Plan would implement Transportation and Parking Demand Management (TDM) programs to incentivize travel by non-automobile modes, such as discounted transit tickets and preferential carpool parking, and strategies that disincentivize travel by automobile, such as higher parking fees. SCA-TRANS-5 would be incorporated as part of the Specific Plan, adopted as conditions of approval, and required, as applicable, of any development under the Specific Plan. Therefore, the Specific Plan would support the recommendation from the CURB report to shift of people away from private auto trips.

As of March 2017, the City requires all new multi-family and non-residential buildings to include full circuit infrastructure for PEV charging stations for at least 10 percent of the total parking spaces, as well as the installation of inaccessible conduits for future expansion of PEV spaces. Future development under the Specific Plan would be required to comply with the City's requirements for installing PEV charging station infrastructure, which will support the acceleration of the electrification of vehicles recommended in the CURB report.

Given the Specific Plan's compliance with SB 743 and recommendations from the City's recent CURB report, transportation GHG emissions from buildout of the Plan Area in 2040 would result in a less-than-significant impact on the environment.

³⁴ Bloomberg Associates, 2018. Pathways to Deep GHG Reductions in Oakland: Final Report, March.

Non-Transportation GHG Emissions

The BAAQMD recommends using the most current version of the California Emissions Estimator Model (CalEEMod Versions 2016.3.2) to estimate emissions of GHGs for a proposed project. CalEEMod uses widely accepted models for emissions estimates combined with appropriate default data for a variety of land use projects that can be used if site-specific information is not available. The default data used in the model are supported by substantial evidence provided by regulatory agencies and a combination of statewide and regional surveys of existing land uses. The primary input data used to estimate non-transportation related GHG emissions for future development projects under buildout of the Plan Area in 2040 are summarized in Table V.D-4. Additional assumptions used to calculate GHG emissions in CalEEMod are summarized in Table V.D-5. A copy of the CalEEMod report, which summarizes the input parameters, assumptions, and findings, is provided in Appendix C.

Impact GHG-1: Construction and operation of development projects under the Specific Plan would generate GHG emissions that could have a significant impact on the environment. (S)

The non-transportation GHG emissions for buildout of the Plan Area in 2040 are summarized in Table V.D-6. The results from CalEEMod estimate that non-transportation GHG emissions for buildout in 2040 are 1.01 MTCO₂e /SP, which exceeds the interim 2040 GHG efficiency threshold of 0.34 MTCO₂e /SP. The largest GHG contributions are from energy use (electricity and natural gas), which account for approximately 73 percent of the overall GHG emissions.

Based on the City's recent CURB report,³⁵ the following actions are recommended for the City to achieve the greatest non-transportation GHG reductions:

1. Shift to 100 percent carbon-free energy by 2030.
2. Eliminate fossil fuels from building heating systems by 2030.

These actions would essentially remove all GHG emissions associated with building energy use and reduce the non-transportation GHG emissions for the 2040 buildout of the Plan Area to about 0.28 MTCO₂e /SP, which is well below the interim 2040 GHG efficiency threshold of 0.34 MTCO₂e /SP and would demonstrate substantial progress toward the City's 2050 goal. Additional measures, such as the use of renewable diesel fuel during construction, could also reduce non-transportation GHG emissions even further.

³⁵ Ibid.

TABLE V.D-4 LAND-USE INPUT PARAMETERS FOR 2040 BUILDOUT OF THE PLAN AREA

Plan Development	CalEEMod Land-Use Type	Unit	Amount
Residential	Apartments Mid Rise	Dwelling Unit	29,100
Office	General Office Building	1,000 sf	16,840
Retail	Regional Shopping Center	1,000 sf	3,220
Industrial	General Light Industry	1,000 sf	260
Institutional	Junior College (2-Year)	1,000 sf	1,310
Parking	Unenclosed Parking with Elevator	Space	16,000

Note: Input parameters are generally consistent with Table V.L-4 Downtown Future Development by Land Use from *Section V.L, Population and Housing*.
Source: A copy of the CalEEMod report is provided in Appendix C.

TABLE V.D-5 SUMMARY OF ASSUMPTIONS FOR CAL EEMOD

CalEEMod Input Category	Operation Assumptions and Changes to Default Data
Construction Phase	The land-use input parameters for 2040 buildout of the Plan Area (Table V.D-3) were divided by 10 to estimate construction GHG emissions over a 15-year period from 2020 to 2035. The GHG emissions were then scaled up by 10 to estimate total construction emissions for 2040 buildout of the Plan Area.
Utility Provider	The default 2008 CO ₂ intensity factor for Pacific Gas and Electric (641 pounds per megawatt hour) was updated to the most recent CO ₂ intensity factor verified by a third party in 2016 (294 pounds per megawatt hour). ^a This represents power from nearly 70% carbon-free sources (nuclear, renewables, and hydroelectric).
Vehicle Trips	All vehicle trips rates were set to zero to exclude the transportation related GHG emissions.
Fireplaces and Woodstoves	Assumed no woodstoves and all the fireplaces are natural gas-based.
Wastewater	Based on the design of the East Bay Municipal Utility District's Wastewater Treatment Plant, emissions estimated from wastewater treatment assumed a process with 100-percent aerobic biodegradation and 100% anaerobic digestion with cogeneration.
Water Use	In accordance with the City's Green Building Ordinance, mandatory measures from the statewide CALGreen Code to reduce indoor water use by approximately 20 percent were included.
Solid Waste	As discussed in Section V.D.2.c.6, the average annual diversion rate for solid waste disposal in the City of Oakland is currently about 68 percent. The default solid waste disposal rates for residential and commercial/industrial land uses in CalEEMod are based on statewide surveys conducted in 1999 ^b and 2005 ^c , respectively. The statewide waste diversion rates in 1999 and 2005 were about 37 percent and 52 percent, respectively. ^d The default disposal rates for the residential and commercial/industrial land uses were reduced by 49 and 33 percent, respectively, to account for the equivalent 68 percent annual average diversion rate currently reported for the City of Oakland.

Note: Default CalEEMod data used for all other parameters not described.

^a Pacific Gas and Electric Company, 2016. Independent Registry Confirms Record Low Carbon Emissions for PG&E.

TABLE V.D-5 SUMMARY OF ASSUMPTIONS FOR CALEEMOD

^b California Integrated Waste Management Board, 1999. Statewide Waste Characterization Study Results and Final Report, December.

^c California Integrated Waste Management Board, 2006. Targeted Statewide Waste Characterization Study: Waste Disposal and Diversion Findings for Selected Industry Groups, June.

^d California Department of Resources Recycling and Recovery (CalRecycle), 2019. California's Estimated Statewide Diversion Rates Since 1989. <https://www.calrecycle.ca.gov/LGCentral/GoalMeasure/DisposalRate/Graphs/EstDiversion/>, accessed June 26, 2019.

Source: A copy of the CalEEMod report is provided in Appendix C.

TABLE V.D-6 NON-TRANSPORTATION GHG EMISSIONS FOR 2040 BUILDOUT OF THE PLAN AREA

Emission Source	CO ₂ e (MT/year)	CO ₂ e (MT/year/SP)	Overall Contribution
Construction ^a	15,182	0.13	12.5%
Operation - Area	1,401	0.01	1.2%
Operation - Energy			
<i>Electricity (Residential)</i>	16,524	0.15	13.69%
<i>Electricity (Non-Residential)</i>	36,540	0.32	30.0%
<i>Natural Gas</i>	34,658	0.31	28.5%
Operation - Waste	10,449	0.09	8.6%
Operation - Water	6,893	0.06	5.7%
Total GHG Emissions	121,646	1.07	100.0%
2040 GHG Efficiency Threshold	--	0.34	--

Notes: MT = metric tons; SP = service population; "--" = not applicable

^a GHG emissions during construction were amortized over 40 years.

Source: A copy of the CalEEMod report is provided in Appendix C.

The actions identified in the CURB report will serve as the focus for policy priorities in the next ECAP update to be adopted in 2020. In addition, California's energy efficiency laws will continue to drive significant improvements in building efficiency, particularly for new buildings. These

These GHG reduction measures were not included in the CalEEMod assumptions for estimating unmitigated GHG emissions, because they are considered speculative at this time. Furthermore, the estimate of unmitigated GHG emissions does not account for beneficial reductions in GHG emissions associated with the replacement of older buildings that are less energy efficient, nor does it account for potential increases in GHG emissions associated with stationary sources (e.g., diesel generators) or haul trips to transport soil and demolition debris during construction. However, based on the results of calculations summarized in Table V.D-6, non-transportation GHG emissions associated with buildout under the Specific Plan, considering current conditions,

available information, and building code requirements, would exceed the interim 2040 GHG efficiency threshold and could result in a potentially significant impact on the environment.

The following mitigation measure is applicable to all future projects in the Plan Area.

Mitigation Measure GHG-1: Reduce GHG Emissions. Projects to be built before 2030 shall demonstrate compliance with a certified Qualified GHG Reduction Plan (if available) or the 2030 GHG efficiency threshold of 0.61 MTCO₂e /SP. Projects to be built between 2030 and 2050 shall demonstrate compliance with a certified Qualified GHG Reduction Plan (if available) or the 2040 GHG efficiency threshold of 0.34 MTCO₂e /SP. To demonstrate compliance with the applicable GHG efficiency threshold, the project applicant shall retain a qualified air quality consultant to quantify the project-specific non-transportation GHG emissions and consider implementing the following measures, as applicable and feasible, to reduce non-transportation GHG emissions below the GHG efficiency threshold. Such measures may include, but are not limited to, the following:

- **Carbon-Free Energy.** 100 percent of electricity purchased shall be from carbon-free sources (e.g., nuclear, renewable, and hydroelectric).
- **Natural Gas.** Fossil natural gas shall not be used in all new or modified buildings.
- **Alternative Fuels for Diesel-Powered Construction Equipment.** All diesel-powered construction equipment shall use renewable diesel fuel that meets California's Low Carbon Fuel Standards and is certified by CARB Executive Officer.
- **Energy Efficiency for Multi-Family Residential Buildings.** New multi-family residential buildings shall be designed to achieve a 15 percent reduction in grid energy use versus a standard Title 24 code-compliant building by following the energy efficiency performance standards set forth in Tier 2 of the 2016 California Green Building Standards Code, Section A4.203.1.2.1. These reductions shall be achieved by employing energy-efficient design features and/or solar photovoltaics at the time of building permit issuance.
- **Energy Efficiency of Non-Residential Buildings.** Newly constructed non-residential buildings shall be designed to achieve a 10 percent or greater reduction in grid energy use versus a standard Title 24 code-compliant building through energy efficiency measures consistent with Tier 2 of the 2016 California Green Building Standards Code, Section A5.203.1.2.1. Alternatively, this measure can be met by installing on-site renewable energy systems that achieve equivalent reductions in building energy use at the time of building permit issuance.
- **Outdoor Electrical Receptacles.** Electrical receptacles shall be included on the exterior of walls of all newly constructed buildings and accessible for purposes of charging or

powering electric landscaping equipment and providing an alternative to using fossil fuel-powered generators.

- **Electric Forklifts and Associated Charging Stations.** All loading docks and truck loading areas shall include a dedicated charging station for electric forklifts.
- **Electric Connections for Transportation Refrigeration Units.** All new loading docks for retail, light industrial, or warehouse uses shall be equipped to provide electric power from the grid, including connections for Transportation Refrigeration Units. Signage shall be posted adjacent to loading docks requiring use of electrification and prohibiting engine idling for more than 5 minutes. (LTS)

Conclusion for GHG Emissions

Impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to transportation GHG emissions. With implementation of **Mitigation Measure GHG-1**, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to non-transportation GHG emissions.

(2) Greenhouse Gas Plans, Policies, or Regulations (Criterion 2)

The Plan Area is in a Priority Development Area (PDA) as defined by Plan Bay Area 2040, which is the regional SCS for the Bay Area. By focusing new development within PDAs, Plan Bay Area 2040 establishes a preferred development scenario, the buildout of which would achieve the plan's GHG reduction targets. Therefore, the Specific Plan would not conflict with the GHG reduction targets in Plan Bay Area 2040.

The project is consistent with and would not hinder the green planning policies of the General Plan because it would promote land use patterns and densities that help improve regional air quality conditions, as demonstrated by its compliance with the preferred development scenario for Plan Bay Area 2040. The project would also be required to comply with the City's Green Building Ordinance, which supports the goals, policies, and actions of the current ECAP and General Plan.

Future development projects under the Specific Plan would be subject to the City's SCAs, some of which reduce GHG emissions. These include but are not limited to preparation and implementation of SCA-GHG-1: Greenhouse Gas (GHG) Reduction Plan (#42) and SCA-TRANS-5: Transportation and Parking Demand Management (#79).

Because the City's 2030 GHG reduction goal is more aggressive than the statewide reduction goal under SB 32, future development projects under the Specific Plan would also be consistent with and not fundamentally conflict with CARB's 2017 Scoping Plan.

Impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to conflicts with applicable GHG plans, policies, or regulations.

d. Cumulative GHG Emissions Impacts

GHG impacts are, by their nature, cumulative impacts because one project by itself cannot significantly contribute to or cause global climate change. The thresholds of significance used in this Draft EIR pertain to a project's contribution to cumulative impacts and whether the project's contribution is cumulatively considerable. See above for more discussion.

E. CULTURAL AND HISTORIC RESOURCES

This section describes the cultural and historic resources setting within the Plan Area and its vicinity; describes relevant State and local regulatory considerations; provides an assessment of potential impacts to these resources and resources that may be identified in the future that could result from implementation of the Specific Plan and its associated future development. Specific Plan policies, existing City policies, and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified.

Cultural resources are sites, buildings, structures, objects, and districts that may have traditional or cultural value based on their historical significance. Cultural resources include, for example, archaeological sites, historic roadways, landscapes, buildings of architectural significance, and can generally be divided into the following subsets pursuant to CEQA: historical, intangible cultural, archaeological, and paleontological resources.

- **Historical Resources.** The definition of "historical resources" is contained in Section 15064.5 of the CEQA Guidelines. Under CEQA, historical resources are defined as those resources meeting one of the four criteria for listing on the California Register of Historical Resources (CRHR). These four criteria are described below in *Section V.E.3.b* of this chapter. Buildings, structures, objects, sites, and historic districts determined to be eligible for or listed on the National Register of Historic Places (NRHP), or that are included in a local register of historical resources, are also considered historical resources under CEQA. A lead agency may also determine an historical resource to be significant for purposes of CEQA.
- **Intangible Cultural Resources.** In recent years, California communities have become increasingly aware of cultural assets or resources that may not be represented in a tangible way, such as buildings, structures, objects, sites, or historic districts, but that might be significant within the history of a community or culture. Examples of this may be: an ethnic festival, parade, or gathering that has been held for a long-standing period of time but does not have a specific location tied to the activity; the location of an important event for which no tangible resource, like the building in which the event took place, is extant; traditional cultural practices, such as dances or songs that convey the traditions of a group of people but that are not necessarily site specific; or an area or neighborhood that was traditionally inhabited by a particular group or that has specific cultural affiliations, but may not have the same physical configuration that it had historically. These types of resources are more difficult to identify, define, and preserve, but they may also be considered a resource for the purpose of CEQA. The Culture Keeping Chapter of the Downtown Oakland Specific Plan touches on some of these types of intangible cultural resources, which are important within the context of Downtown Oakland. The Specific Plan begins to shape goals and policies for ensuring their longevity within the community.

- **Archaeological Resources.** Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a area) or historic (after the introduction of writing). Most of such places in this region are associated with either Native American or Euroamerican occupation of the area. The most frequently encountered prehistoric and early historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and sites of rock art. Historic archaeological sites may include foundations or features such as privies, corrals, and trash dumps.
- **Paleontological Resources.** Paleontological resources are the fossilized remains of plants and animals, including vertebrates (animals with backbones), invertebrates (e.g., starfish, clams, ammonites, and marine coral), and fossils of microscopic plants and animals (microfossils). Paleontological resources are distinct from archaeological resources in that they record past plant and animal life, and not human history.

1. Setting

This section describes the pre-historic and historical context of the region and describes the cultural resources within the Plan Area and their significance under CEQA. Information in this subsection was taken from: (1) background research conducted by cultural resources staff and architectural historian Bridget Maley of architecture + history. A full report prepared by architecture + history can be found in Appendix D of this document.

The following subsections include methods of the analysis, an overview of the area's pre-historic and historic setting, and identification of historic and potentially significant historic properties.

a. Methods

Background research for this analysis included preparing a Historic Building Typology Study to supplement the Oakland Cultural Heritage Survey (OCHS); conducting a records search, and literature review; and consultation with the Native American Heritage Commission (NAHC) and historical organizations. This research was conducted to better understand the historical context of the Plan Area and identify previously conducted cultural resource studies and previously recorded cultural resources within or adjacent to the Plan Area.

(1) Historic Building Typology Study

As part of the analysis for this EIR, architecture + history worked with the OCHS to develop the Downtown Oakland Historic Building Typology Study, which is included in Appendix D of this EIR.

The study includes building types related to the recent past, as developed in the post-World War II era.

The urban fabric of Downtown Oakland is a complex mix of old and new, large- and small-scale, designed and vernacular properties representing a broad range of building types, architectural styles, and development eras. The City's longstanding commitment to understanding historic resources manifest in the Oakland Cultural Heritage Survey (OCHS), which has extensively documented Downtown Oakland's historic and cultural resources. An overview of the history and development of Oakland is contained in the City's Historic Preservation Element, and *Section V.E.2* of this EIR, above, summarizes the development of downtown. Further, the Context Section of the Downtown Oakland Specific Plan lays out the population trends and influences that are reflected in the multi-cultural nature of Oakland, as manifest in downtown.¹

OCHS has prepared extensive neighborhood histories, context statements, and individual property and historic district Areas of Primary Importance (API) and Areas of Secondary Importance (ASI) documentation for resources within the Plan Area. However, documentation of Downtown Oakland's properties of the recent past (1950-1970s) is sparse, necessitating further research into the places that define that period. Generally, resources that are 50 years old or older are eligible for listing in inventory; however, when a resource has exceptional significance, it may be designated if it has not yet achieved 50 years in age. By 2020, resources that were built in 1970 will be 50 years in age. While a complete re-inventory of the entire downtown area was not feasible, the Historic Building Typology Study defines prominent building types, provides examples, identifies geographic areas in which they are located, and puts forward an assessment of threats to each type.

(2) Intangible Cultural Resources

There are broader cultural overlays by various significant groups that have used, shaped, and influenced downtown's multi-cultural experience. Sometimes these overlays are composed of intangible cultural resources, which have not been previously documented or the impact of which are not fully known at the urban scale. These resources should be more fully understood and highlighted even if they are not associated with a specific element of the built environment, or if their association with a built resource was not linked to its original use. The Culture Keeping chapter of the Specific Plan begins to unveil these types of resources, groups, and assets that have a presence in Downtown Oakland. Similar to a re-inventory of the historic built environment of downtown for this EIR, it was not possible to identify all of the cultural groups, festivals, celebrations, musical and craft traditions, and other intangible resources that relate to

¹ City of Oakland, 2019. Downtown Oakland Specific Plan Preliminary Draft Plan, January 16, pages 17-23.

Downtown Oakland. Outreach to Native American groups (described in detail below) is one means to understand how the Specific Plan may impact one set of downtown constituents. The City of Oakland has begun to study development-based planning and zoning tools that would assist in the preservation of historic uses that are production, distribution, and repair based, as well as arts or hand-craft related.² Further, in its Equity Assessment of the Plan Options, the City has begun to understand how Plan implementation would relate to issues of equity, displacement, gentrification, and the “widening income, health, and opportunity gaps affecting Oakland’s residents today.”³ Woven throughout the Equity Assessment document is an assessment of how Oakland’s diverse population contributes to the varied cultures, cultural traditions, and intangible resources that contribute to downtown’s vibrancy as a place. Based on feedback in the early stages of the Specific Plan effort, it became apparent that “while many Oakland residents feel immense pride in, and connection to their deep cultural heritage, many do not see their communities, cultural identities, or artistic traditions represented or supported in planning documents to date, the Oakland that has been emerging in recent years, or conditions that are rapidly displacing longstanding residents.”⁴ Based on the Equity Assessment, the Specific Plan deepened its engagement efforts and developed policies and an implementation strategy to maintain long-standing Oakland traditions, cultures, celebrations, crafts, and the artistic vision of the city as downtown evolves.

(3) Records Search

An archaeological literature review and records search was conducted at the Northwest Information Center (NWIC), housed at Sonoma State University, on November 26, 2018. This inventory effort included the Plan Area and a ¼-mile radius around the Plan Area, collectively termed the Plan study area. The objective of this records search was to identify prehistoric or archaeological resources that have been previously recorded within the Plan study area during prior cultural resource investigations. No built environment resource files or information were requested as part of this search.

The records search results indicate that no less than 74 previous investigations have been conducted and documented within the project study area since 1977. At least 55 of the previous studies encompass portions or all of the Plan Area; the remaining 19 resource investigations cover the Plan study area (Appendix D, Table 4-1 and Table 4-2). While numerous studies include

² Strategic Economics, 2017. Memorandum to Ed Manasse and Joanna Winter, City of Oakland from Nadine Fogarty and Alison Nemirow, Strategic Economics, re: Development-Based Tools to Preserve and Expand Arts and PDR Workspaces, September 2017.

³ City of Oakland, Institute for Social, Economic, Environmental, and Educational Design (ISEEED)., et al., 2018. Keeping “the Town” in Downtown: An Assessment and Recommendations to Support Racial Equity in the Downtown Oakland Specific Plan., page 4, November 29.

⁴ Ibid.

portions of Downtown Oakland, only approximately 40 percent of the Plan Area has been surveyed.

The records search results indicated that 24 cultural resources have been previously recorded within the Plan Area (Tables V.E-1 and V.E-2). These resources include 15 historic-era sites (including 2 built resources), 6 prehistoric sites, and 3 prehistoric sites of an unknown age. Each resource is briefly described in the table below.

(1) Native American Coordination

PaleoWest contacted the Native American Heritage Commission (NAHC) as part of the cultural resource assessment on November 30, 2018, for a review of the Sacred Lands File. The objective of the Sacred Lands File (SLF) search was to determine if the NAHC had any knowledge of Native American cultural resources (e.g., traditional use or gathering areas, places of religious or sacred activity, etc.) within the immediate vicinity of the Plan Area. The NAHC responded with a letter dated December 4, 2018, stating “a records search of the Native American Heritage Commission (NAHC) Sacred Lands File was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any APE”; the NAHC requested that seven Native American tribal groups be contacted to solicit information regarding cultural resources that could be impacted by the Specific Plan (Appendix D). Seven tribal groups were contacted by email or standard mail on December 10, 2018.

As of January 14, 2019, three responses have been received. Irene Zwierlein, of the Amah Mutsun Tribal Band of Mission San Juan Bautista, requested to be notified of any ground-disturbing activities in the Plan Area. She has no additional information regarding cultural resources in the area. Edward Ketchum of the Amah Mutsun Tribal Band stated that the Plan Area is outside of their tribal territory. PaleoWest conducted follow up phone calls on January 14, 2019 to the remaining individuals that had not yet responded to the scoping letter. One response was received as a result of this follow up outreach attempt from Valentin Lopez of the Amah Mutsun Tribal Band; he stated that the Plan Area is outside of his territory and therefore has no comments. An example of the SLF search request letter, the list of contacts, a sample scoping letter, and a contact/response matrix are included in Appendix D.

In addition to scoping and Native American outreach as a best management practice, PaleoWest assisted the City with Senate Bill (SB) 18 consultation (SB 18, see *Section V.E.3.b.7* of this chapter for further discussion). To facilitate this government-to-government consultation on behalf of the City, PaleoWest contacted the NAHC by email on December 10, 2018 with a request for the SB 18 Tribal Consultation List. The NAHC provided a list of tribes that would be interested in consulting

TABLE V.E-1 ARCHAEOLOGICAL RESOURCES WITHIN THE PLAN AREA

Primary Number/ Trinomial	Resource Name	Age	Recorder	Eligibility Recommendation
P-01-000016*	Block 1 Cypress I-880 Replacement Project (historic city block dated between 1850 and 1910)	Historic	1994 (Jack Mc Ilroy, Anthropological Studies Center, Sonoma State University)	7R (not evaluated)
P-01-000243*	Block 3, Cypress I-880 Replacement Project (historic city block dated between 1860 and 1910)	Historic	1995 (Michael Meyer, Anthropological Studies Center, Sonoma State University)	7R (not evaluated)
P-01-000244*	Block 2, Cypress I-880 Replacement Project. (historic city block dated between 1860 and 1910)	Historic	1994 (Jack Mc Ilroy, Anthropological Studies Center, Sonoma State University)	7R (not evaluated)
P-01-001783/CA-ALA-000623H	Segments of the Southern Pacific Railroad	Historic	1990 (G. Davis, Dames & Moore); 1994 (Brian Hatoff, Woodward-Clyde Consultants); 1996 (John W. Snyder, P.S. Preservation Services); 1997 (E. McKee, Caltrans District 4); 1998 (Elizabeth McKee, Caltrans District 4); 1999 (Elizabeth McKee, Caltrans District 4); 1999 (William Kostura, Caltrans District 4); 2001 (Tracy Bakic, Cindy Baker, PAR Environmental Services, Inc.); 2001 (K. Van Citters, K. Bisson, Van Citters: Historic Preservation LLC); 2002 (C. McMorris, A. Blosser, JRP); 2003 (Ward Hill, [none]); 2006 (Christopher Canzonieri, [none]); 2008 (David Buckley, William Self Associates); 2009 (J. Dougherty, J. P. Glover, PAR Environmental Services); 2009 (T. Martin, K. Frank, GANDA); 2009 (T. Martin, K. Frank, GANDA); 2010 (Lisa Holm, Lee Panich, Pacific Legacy, Inc.); 2015 (Kruger Frank, Erica Schultz, GANDA); 2015 (Daniel Shoup, A/HC); 2017 (Nicholas Radtky, InContext)	6c (not eligible)

TABLE V.E-1 ARCHAEOLOGICAL RESOURCES WITHIN THE PLAN AREA

Primary Number/Trinomial	Resource Name	Age	Recorder	Eligibility Recommendation
P-01-002190	Western Pacific Railroad (railway bridge)	Historic Built Resource	1994 ([none], Woodward-Clyde Consultants); 1994 ([none], Woodward-Clyde Consultants); 1994 ([none], Woodward-Clyde Consultants); 1994 ([none], Woodward-Clyde Consultants); 1994 ([none], Woodward-Clyde Consultants); 1997 (Celia McCarthy, Port of Oakland); 1998 (Elizabeth McKee, Caltrans District 4); 1999 (William Kostura, Caltrans District 4); 2002 (Sara Palmer, Judith Marvin, LSA Associates, Inc.); 2002 (Madeline Lanz, Jones & Stokes); 2002 (Madeline R. Lanz, Jones & Stokes); 2002 (C. McMorris, A. Blosser, JRP Historical Consulting); 2005 (B. Larson, JRP Historical Consulting); 2005 (B. Larson, JRP Historical Consulting); 2005 (B. Larson, JRP); 2006 (Christopher Canzonieri, [none]); 2009 (T. Martin, K. Frank, GANDA); 2014 (Dean M. Duryea, Jr., Statistical Research, Inc.)	3B (eligible)
P-01-010520*	Oakland Block 55 (6 features)	Historic	2002 (Thad M. Van Bueren, Caltrans District 4)	6C (not eligible)
P-01-010529*	ESA-OAK-011a (isolate railroad construction materials)	Historic	2000 (Dean Martorana, K. Ross Way, Environmental Science Associates)	7R (not evaluated)
P-01-010531*	ESA-OAK-001c (isolate railroad construction materials)	Historic	2001 (K. Ross Way, Christine O'Rourke, Environmental Science Associates)	7R (not evaluated)
P-01-010532	ESA-Oak-002 (artifact scatter)	Historic	2000 (K. Ross Way, Environmental Science Associates); 2014 (Ross Way, Robert Ramirez, Kevin Hunt, Rincon Consultants)	6C (not eligible)
P-01-010533*	ESA-Oak-003 (isolate fire hydrant)	Historic	2000 (K. Ross Way, Environmental Science Associates)	7R (not evaluated)
P-01-010534*	ESA-Oak-004 (isolate manhole)	Historic	2001 (K. Ross Way, Christine K. O'Rourke, Environmental Science Associates)	7R (not evaluated)

TABLE V.E-1 ARCHAEOLOGICAL RESOURCES WITHIN THE PLAN AREA

Primary Number/ Trinomial	Resource Name	Age	Recorder	Eligibility Recommendation
P-01-010535*	ESA-Oak-005 (isolate manhole)		Historic	2001 (K. Ross Way, Environmental Science Associates) 7R (not evaluated)
P-01-010861*	JLS-Site C (wharf planks)		Historic	2007 (Tom Young, William Self Associates) 6C (not eligible)
P-01-010919/ CA-ALA- 000631H*	Block 42 (Historic block)		Historic	2008 (Janet Pape, Caltrans District 4) 6C (not eligible)
P-01-000042/ CA-ALA- 000022*	Easton Building (isolate mortar)		Prehistoric	1928 ([none], San Francisco Chronicle); 1967 (Richard Schwartz, [none]); 2006 (Richard Schwartz, [none]) 7R (not evaluated)
P-01-000091/ CA-ALA- 000314*	Nelson's 314 (Mortar & burial)		Prehistoric	1910 (Nelson, Pilling, [none]); 1952 (Meighan, Baumhoff, [none]); 1999 (J. Nelson, Far Western Anthropological Research Group) 7R (not evaluated)
P-01-010690*	AC-149 (Isolate clam & oyster shells)		Prehistoric	2012 (Suzanne Baker, Michael Smith, Archaeological/Historical Consultants) 7R (not evaluated)
P-01-010691*	AC-150 (isolate shell)		Prehistoric	2012 (Suzanne Baker, Michael Smith, Archaeological/Historical Consultants) 7R (not evaluated)
P-01-010796*	Fallon & 7TH Street (burial & mortar)		Prehistoric	2006 (Richard Schwartz, [none]) 7R (not evaluated)
P-01-010994*	Indian Charmstone		Prehistoric	2008 (Richard Schwartz, [none]) 7R (not evaluated)
P-01-010693*	AC-152 (shell scatter)		Unknown	2004 (Suzanne Baker, Michael Smith, Archaeological/Historical Consultants) 7R (not evaluated)
P-01-010695*	AC-154 (shell fragments)		Unknown	2004 (Suzanne Baker, Michael Smith, Archaeological/Historical Consultants) 7R (not evaluated)
P-01-010696*	AC-155 (shell fragments)		Unknown	2004 (Suzanne Baker, Michael Smith, Archaeological/Historical Consultants) 7R (not evaluated)

*Indicates that the resource has been evaluated more than 10 years ago and will need to be reevaluated.

TABLE V.E-2 CULTURAL RESOURCES RECORDED WITHIN THE PROJECT STUDY AREA

Primary/Trinomial	Resource Name	Location	Age	Recording Events
P-01-000256	Block 4, Cypress I-880 Replacement Project (historic city block dated between 1870 and 1951)		Historic	1995 (Anmarie Medin, ASC SSU)
P-01-000257	Block 6, Cypress I-880 Replacement Project (historic city block dated between 1870 and 1951)		Historic	1995 (Anmarie Medin, Anthropological Studies Center, Sonoma State University)
P-01-000258	Block 7, Cypress I-880 Replacement Project (historic city block dated between 1900 and 1951)		Historic	1995 (Anmarie Medin, Anthropological Studies Center (SSU))
P-01-001783/ CA-ALA-000623H	Segments of the Southern Pacific Railroad		Historic	1990 (G. Davis, Dames & Moore); 1994 (Brian Hatoff, Woodward-Clyde Consultants); 1996 (John W. Snyder, P.S. Preservation Services); 1997 (E. McKee, Caltrans District 4); 1998 (Elizabeth McKee, Caltrans District 4); 1999 (Elizabeth McKee, Caltrans District 4); 1999 (William Kostura, Caltrans District 4); 2001 (Tracy Bakic, Cindy Baker, PAR Environmental Services, Inc.); 2001 (K. Van Citters, K. Bisson, Van Citters: Historic Preservation LLC); 2002 (C. McMorris, A. Blosser, JRP); 2003 (Ward Hill, [none]); 2006 (Christopher Canzonieri, [none]); 2008 (David Buckley, William Self Associates); 2009 (J. Dougherty, J. P. Glover, PAR Environmental Services); 2009 (T. Martin, K. Frank, GANDA); 2010 (Lisa Holm, Lee Panich, Pacific Legacy, Inc.); 2015 (Kruger Frank, Erica Schultz, GANDA); 2015 (Daniel Shoup, A/HC); 2017 (Nicholas Radtkey, InContext)
P-01-001788	Block 5, Cypress I-880 Replacement Project (historic city block dated between 1870 and 1951)		Historic	1996 (Anmarie Medin, ASC, SSU)
P-01-003142	Bethlehem Shipbuilding Plant, Craneway No 1		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003143	Bethlehem Shipbuilding Plant, Craneway No 2		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)

TABLE V.E-2 CULTURAL RESOURCES RECORDED WITHIN THE PROJECT STUDY AREA

Primary/Trinomial	Resource Name	Location	Age	Recording Events
P-01-003144	Bethlehem Shipbuilding Plant, Craneway No 3		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003145	Bethlehem Shipbuilding Plant, Craneway No 4		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003146	Bethlehem Shipbuilding Plant, Craneway No 5		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003147	Bethlehem Shipbuilding Plant, Craneway No 6		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003148	Bethlehem Shipbuilding Plant, Shipway 1		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003149	Bethlehem Shipbuilding Plant, Shipway 2		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003150	Bethlehem Shipbuilding Plant, Shipway 3		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003151	Bethlehem Shipbuilding Plant, Shipway 4		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003152	Bethlehem Shipbuilding Plant, Welding Platform		Historic	1988 (Michael Crobett, Mary Hardy, Alameda City Planning Department)
P-01-003157	Head Houses and Ways		Historic	1988 (Michael Corbett; Mary Hardy, Alameda City Planning Department); 2017 ([none], Carey and Co., Inc.)
P-01-003170	Associated Oil Co Wharf, Boat Marina		Historic	1988 (Michael Corbett, Mary Hardy, Alameda County Planning Department)
P-01-003171	Associated Oil Co Wharf, West End of Wharf; Rusty Pelican		Historic	1988 (Michael Corbett, Mary Hardy, Alameda County Planning Department)
P-01-003218	Todd Shipyard, Alameda		Historic	1988 (Michael Corbett, Mary Hardy, Alameda City Planning Department); 1998 (Michael Corbett, Mary Hardy, Basin Research Associates)
P-01-010530	ESA-OAK-001b (Railroad grade)		Historic	2000 (K. Ross Way, Environmental Science Associates)
P-01-010533	ESA-Oak-003 (saltwater fire suppression system feature)		Historic	2000 (K. Ross Way, Environmental Science Associates)
P-01-010534	ESA-Oak-004 (abandon manhole)		Historic	2001 (K. Ross Way, Christine K. O'Rourke, Environmental Science Associates)

TABLE V.E-2 CULTURAL RESOURCES RECORDED WITHIN THE PROJECT STUDY AREA

Primary/Trinomial	Resource Name	Location	Age	Recording Events
P-01-000026/CA-ALA-000005	Nelson's 314a (prehistoric site)		Prehistoric	1910 (N. Nelson, A. Pilling, University of California, Berkeley); 2005 (Suzanne Baker, Archaeological/Historical Consultants); 2008 (Christian Gerike, Neal Kaptain, LSA Associates, Inc.)
P-01-010692	AC-151 (shell scatter)		Prehistoric	2012 (Suzanne Baker, Michael Smith, Archaeological/Historical Consultants)
P-01-010694	AC-153 (shell scatter)		Prehistoric	2004 (Suzanne Baker, Michael Smith, Archeological/Historical Consultants); 2008 (Christian Gerike, Neal Kaptain, LSA Associates, Inc.)
P-01-010695	AC-154 (shell scatter)		Unknown	2004 (Suzanne Baker, Michael Smith, Archaeological/Historical Consultants)
P-01-010696	AC-155 (shell scatter)		Unknown	2004 (Suzanne Baker, Michael Smith, Archaeological/Historical Consultants)

Source: NWIC, Sonoma State University, Rohnert Park, November 26, 2018. Additional sources consulted during the cultural resource literature review and records search include the NRHP, the Office of Historic Preservation Archaeological Determinations of Eligibility, and the Office of Historic Preservation Directory of Properties in the Historic Property Data File. There are no listed historic properties, historical resources, or historic landmarks recorded within the Plan study area.

with the City during the planning stages of the Downtown Oakland Specific Plan. SB 18 letters were sent out on behalf of the City. The City is facilitating Assembly Bill (AB) 52 (see *Section V.E.3.b.8* of this chapter for further discussion) and SB 18 consultation.

b. Prehistoric Context and Setting

Categorizing the prehistoric period into cultural stages allows researchers to describe a broad range of archaeological resources with similar patterns and components during a given timeframe, thereby creating a regional timeline. In California, the development of systems to categorize prehistoric artifacts and other archaeological resources started with the first professional and academic-sponsored archaeological investigations in central California in the 1930s. As a result of these investigations, a scheme was developed to date cultural materials found throughout central California, dividing prehistoric cultures into Early, Middle, and Late horizons (horizons refer to a distinctive type of artifact, art style, or cultural trait found across a region from a limited time period). This method of organizing and dating materials found in archaeological investigations in Central California became known as the Central California Taxonomic System (CCTS).⁵

As archaeological investigations conducted further fieldwork, local exceptions to the CCTS were discovered. The accumulation of these exceptions, coupled with the development of chemical methods for dating archaeological deposits in the 1950s through 1970s, made it possible to date prehistoric artifacts more accurately. Much of the subsequent archaeological investigation in Central California throughout the 1960s and 1970s focused on the creation and refinement of local versions of the CCTS. Beginning in the 1970s, archeologists in California began to identify artifacts and remains by “patterns” that emphasized similar cultural practices between groups, rather than strictly grouping deposits by time period.

In 2007, Milliken et al.⁶ developed a “hybrid system” for cataloging artifacts in San Francisco Bay Area based on Early-Middle-Late Periods. The “hybrid system” was first described in the CCTS

⁵ Fredrickson, David A., 1973. *Early Cultures of the North Coast Ranges, California*. Doctoral dissertation, Department of Anthropology, University of California, Davis.; Fredrickson, David A., 1994. *Archaeological Taxonomy in Central California Reconsidered*. In *Toward a New Taxonomic Framework for Central California Archaeology*. Essays by James A Bennyhoff and David A. Fredrickson, Richard E. Hughes, editor, pages 93-104. Contributions of the University of California Archaeology Research Facility 52. Berkeley, CA.

⁶ Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier and David A. Fredrickson, 2007. *Punctuated Culture Change in the San Francisco Bay Area*. In *California Prehistory: Colonization, Culture, and Complexity*, Terry L. Jones and Kathryn A. Klar, editors, pages 99-123. Altamira Press, Lanham, MD.

and later refined by Groza⁷'s survey of central California, which accurately dated over 100 shell beads made with manufacturing techniques specific to their time period. The discovery of these shell bead patterns (termed shell bead horizons), with identifiable manufacturing techniques and styles particular to the time they were created, in deposits throughout the Bay Area allowed Milliken to characterize the prehistoric settlement patterns of the area into the following periods:

- Early Holocene (Lower Archaic) from 8000 to 3500 B.C.
- Early Period (Middle Archaic) from 3500 to 500 B.C.
- Lower Middle Period (Initial Upper Archaic) from 500 B.C. to A.D. 430.
- Upper Middle Period (Late Upper Archaic) from A.D. 430 to 1050.
- Initial Late Period (Lower Emergent) from A.D. 1050 to 1550.
- Terminal Late Period, post-A.D. 1550.

No archaeological evidence dating to pre-8000 B.C. has been located in the Bay Area. The lack of archaeological material in the Bay Area dating to before 8000 B.C. is likely due to subsequent environmental changes that submerged sites, buried sites beneath river and stream sediment, or destroyed sites through stream erosion.

(1) Early Holocene, Early Period and Lower Middle Period

The intensive use of shellfish throughout the San Francisco Bay Area, reflected in both coastal and bay deposits of discarded shells (called middens or shellmounds), indicated a high level of economic interconnectedness and trade in the region during prehistoric times. Due to this interconnectedness, the idea of a distinct San Francisco Bay archaeological region was used.⁸ Three sites provided the basis for the first model of settlement patterns and cultural change over time in Central California: the Emeryville Shellmound (CA-ALA-309), the Ellis Landing Site (CA-CCO-295), and the Fernandez Site (CA-CCO-259).⁹

A “generalized mobile forager” pattern, marked by the use of milling slabs and handstones (hand-held stones used with a grind seeds or grain on larger rocks known as milling slabs) and the manufacture of large, wide-stemmed and leaf-shaped projectile points, emerged at the periphery of the Bay Area during the Early Holocene Period (8000 to 3500 B.C.).

Beginning around 3500 B.C., evidence of sedentism and increased regional trade emerged. This Early Period lasted until circa 500 B.C.¹⁰

⁷ Groza, Randy G., 2002. An AMS chronology for central California *Olivella* shell beads. Master's thesis. Department of Anthropology, San Francisco State University, San Francisco, CA.

⁸ Moratto, Michael J., 1984. *California Archaeology*. Academic Press, Orlando, FL.

⁹ Ibid, page 277.

¹⁰ Milliken, Randall, Richard T. Fitzgerald, Mark G. Hylkema, Randy Groza, Tom Origer, David G. Bieling, Alan Leventhal, Randy S. Wiberg, Andrew Gottsfield, Donna Gillette, Viviana Bellifemine, Eric Strother, Robert Cartier and

A major disruption in symbolic integration systems (circa 500 B.C.) marked the beginning of the Lower Middle Period (500 B.C. to A.D. 430). Bead Horizon M₁, dating from 200 B.C. to A.D. 430, is described by Milliken et al.¹¹ as marking a 'cultural climax' within the San Francisco Bay Area.

(2) Upper Middle Period

The Upper Middle Period (A.D. 430 to 1050) is marked by the collapse of the Olivella saucer bead trade in central California, abandonment of many Bead Horizon M₁ sites, an increased occurrence of sea otter bones in those sites that were not abandoned, and the spread of the extended burial mortuary pattern, characteristic of the Meganos culture, into the interior East Bay. Bead Horizons M₂ (A.D. 430 to 600), M₃ (A.D. 600 to 800), and M₄ (A.D. 800 to 1050) were identified within this period.¹²

(3) Initial Late Period and Terminal Late Period

The Initial Late Period, dating from A.D. 1050 to 1550, is characterized by increased manufacture of status objects. In lowland central California during this period, there was evidence for increased sedentism and integration of ceremonial practices by groups throughout the region. The beginning of the Late Period (circa A.D. 1000) is marked by the Middle/Late Transition bead horizon. The Terminal Late Period began circa A.D. 1550 and continued until European settlement of the area.

c. Ethnographic Setting

This section provides a brief summary of the ethnography of the Plan Area and vicinity and is intended to provide a general background only.

The Plan Area lies within the region occupied by the Ohlone or Costanoan group of Native Americans at the time of historic contact with Europeans.¹³ Although the term Costanoan is derived from the Spanish word *Costaños*, or "coast people," the population it identifies is based in linguistics. The Costanoans spoke a language now considered one of the major subdivisions of the Miwok-Costanoan, belonging to the Utian family within the Penutian language stock.¹⁴ Costanoan designates a family of eight languages.

David A. Fredrickson, 2007. Punctuated Culture Change in the San Francisco Bay Area. In *California Prehistory: Colonization, Culture, and Complexity*, Terry L. Jones and Kathryn A. Klar, editors, pages 114-115. Altamira Press, Lanham, MD.

¹¹ Ibid, page 115.

¹² Ibid, page 116.

¹³ Kroeber, Alfred L., 1970. *Handbook of the Indians of California*, pages 462-473. The Filmer Brothers Press, Taylor & Taylor, San Francisco, CA.

¹⁴ Shipley, William F., 1978. Native Languages of California. In *Handbook of North American Indians*, Vol. 8, *California*, Robert F. Heizer, editor, pages 82-94. Smithsonian Institution, Washington, D.C.

Tribal groups occupying the area from the Pacific Coast to the Diablo Range and from San Francisco to Point Sur spoke the other seven languages of the Costanoan family. Modern descendants of the Costanoan prefer to be known as Ohlone. The name Ohlone is derived from the Oljon group, which occupied the San Gregorio watershed in San Mateo County.¹⁵ The two terms (Costanoan and Ohlone) are used interchangeably in much of the ethnographic literature.

On the basis of linguistic evidence, it has been suggested that the ancestors of the Ohlone arrived in the San Francisco Bay area about A.D. 500, having moved south and west from the Sacramento-San Joaquin Delta. The ancestral Ohlone displaced speakers of a Hokan language and were probably the producers of the artifact assemblages that constitute the Augustine Pattern, which was characterized by a diet of acorn, game, and fish as well as roundhouses and the smoking of tobacco from wooden and stone pipes.

Although linguistically linked as a family, the eight Costanoan languages comprised a continuum in which neighboring groups could probably understand each other. However, beyond neighborhood boundaries, each group's language was reportedly unrecognizable to the other. Each of the eight language groups was subdivided into smaller village complexes or tribal groups. These groups were independent political entities, each occupying specific territories defined by physiographic features. Each group controlled access to the natural resources of its territory, which also included one or more permanent villages and numerous smaller campsites used as needed during a seasonal round of resource exploitation. Chochenyo, or East Bay Costanoan, was the language spoken by the estimated 2,000 people who occupied the "east shore of San Francisco Bay between Richmond and Mission San Jose, and probably also in the Livermore Valley."¹⁶

Extended families lived in domed structures thatched with tule, grass, wild alfalfa, or ferns.¹⁷ Semi-subterranean sweathouses were built into pits excavated in stream banks and covered with a structure against the bank. The tule raft, propelled by double-bladed paddles, was used to navigate across San Francisco Bay.¹⁸

Mussels were an important staple in the Ohlone diet, as were acorns of the coast live oak, valley oak, tanbark oak, and California black oak. Seeds and berries, roots and grasses, and the meat of

¹⁵ Bocek, Barbara, 1986. Hunter-Gatherer Ecology and Settlement Mobility along San Francisquito Creek. Doctoral dissertation, page 8. Department of Anthropology, Stanford University, Stanford, CA.

¹⁶ Levy, Richard, 1978. Costanoan. In *Handbook of North American Indians*, Vol. 8, *California*, Robert F. Heizer, editor, page 485. Smithsonian Institution, Washington, D.C.

¹⁷ Ibid, page 482

¹⁸ Kroeber, Alfred L., 1970. *Handbook of the Indians of California*, page 468. The Filmer Brothers Press, Taylor & Taylor, San Francisco, CA.

deer, elk, grizzly, rabbit, and squirrel formed the Ohlone diet. Careful management of the land through controlled burning ensured a plentiful, reliable source of all these foods.¹⁹

The Ohlone usually cremated a corpse immediately upon death. If there were no relatives to gather wood for the funeral pyre, interment occurred. Mortuary goods comprised most of the personal belongings of the deceased.²⁰

The arrival of the Spanish in 1775 led to a rapid and major reduction in native California populations. Diseases, declining birth rates, and the effects of the mission system served to largely eradicate the aboriginal life ways. Forcibly brought into the missions, the surviving Ohlone, along with the Esselen, Yokuts, and Miwok, were transformed from hunters and gatherers into agricultural laborers.²¹ Following secularization of the mission system in the 1830s, numerous ranchos were established in the 1840s. Generally, the few Indians who remained were then forced, by necessity, to work on the ranchos.

In the 1990s, some Ohlone groups (e.g., the Muwekma, Amah, and Esselen further south) submitted petitions for federal recognition.²² Many Ohlone are active in preserving and reviving elements of their traditional culture and are active participants in the monitoring and excavation of archaeological sites.

d. Paleontological Setting

On a regional scale, fossilized plants, animals, and microorganism are prevalent through the East Bay. Many of the hills in the East Bay are made up of sedimentary bedrock that is known to contain a wide range of fossils, including radiolaria, mollusks, diatoms, foraminifera, and non-marine vertebrates. In addition, even geologically-young fluvial deposits have been known to contain freshwater mollusks and extinct late-Pleistocene vertebrate fossils.²³

¹⁹ Levy, Richard, 1978. Costanoan. In *Handbook of North American Indians*, Vol. 8, *California*, Robert F. Heizer, editor, page 491. Smithsonian Institution, Washington, D.C.

²⁰ Ibid, page 490.

²¹ Levy, Richard, 1978. Costanoan. In *Handbook of North American Indians*, Vol. 8, *California*, Robert F. Heizer, editor, pp. 485-495. Smithsonian Institution, Washington, D.C.; Shoup, Laurence, Randall T. Milliken and Alan K. Brown, 1995. Inigo of Rancho Posolmi: The Life and Times of a Mission Indian and His Land. On file at Woodward Clyde, 500 12th Street, Oakland, CA.

²² Esselen Nation, 2007. The Ohlone/Costanoan Esselen Nation Today. Available at: <www.esselenation.com/OCENToday.html>, accessed November 2007.

²³ Grayemer, 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 MF-2342, scale 1:50,000. Available at: <https://pubs.usgs.gov/of/2006/1037/>, accessed March 27, 2019.

The series of stream courses that deposited sediments during the Pleistocene no longer exist, and those ancient sediments have been cut into by modern-day streams. As a result, many of the Pleistocene-age fluvial and alluvial fan deposits exist as subtle topographic highs between the bay margin and the East Bay Hills. The Pleistocene deposits are similar in composition and character to sediments deposited by present-day streams, but owing to their age, they are dense and more consolidated, and have locally preserved the remains of Pleistocene flora and fauna.

The Plan Area is primarily underlain by Pleistocene-age deposits. Some parts of the Plan Area are underlain with alluvial fan and fluvial deposits from the Holocene age, as well as artificial fill near Jack London District and the Lake Merritt Estuary. Ground-disturbing development within Pleistocene-age deposits which underlay portions of the Plan Area could affect previously-unrecorded paleontological resources.

e. Historical Setting

(1) Larger Bay Area

The historic period in the eastern San Francisco Bay region began with the Fages-Crespi expedition of 1770. The Fages party explored the eastern shore of San Francisco Bay, eventually reaching the location of modern Fremont, where they traded with the local Costanoans. Members of the expedition eventually sighted the entrance to San Francisco Bay from the Oakland Hills.

In 1776, the Anza-Font expedition traveled through the same area and also traded with residents of native villages encountered along the way. The most significant impact of the European presence on the local California natives, however, was not felt until the Spanish missions were established in the region.²⁴

In 1775, Captain Juan Manuel Ayala's expedition studied the San Francisco Bay and ventured up the Sacramento and San Joaquin rivers. The first mission in the region was established the following year with the completion of Mission San Francisco de Asis (Mission Dolores) in San Francisco. Mission Santa Clara followed in 1777, and Mission San Jose in 1797. The Mission era lasted approximately 60 years and proved to be the downfall of the native inhabitants of the region, who were brought to the missions to be assimilated into a new culture and provide labor for the missionaries. Diseases introduced by the early explorers and missionaries, and the contagions associated with the forced communal life at the missions, killed many local peoples,

²⁴ Cook, Sherburne F., 1957. The Aboriginal Population of Alameda and Contra Costa Counties, California. University of California Archaeological Survey Reports 16(4), page 132.

while changes in land use made traditional hunting and gathering practices increasingly difficult. It is estimated that by 1832, the Costanoan population had been reduced from a high of over 10,000 in 1770 to less than 2,000.

In 1820, Sergeant Luis Maria Peralta received a grant of “10 square leagues” of land in the East Bay in recognition of his long, faithful military service in California. Peralta named his grant Rancho San Antonio. Rancho San Antonio comprised the land that lay from the water’s edge to the crest of the Oakland hills between San Leandro Creek to the south and El Cerrito Creek to the north,²⁵ completely encompassing modern-day Oakland, Berkeley, Emeryville, Piedmont, Albany, Alameda, and a portion of San Leandro.²⁶

Following the U.S. takeover of Alta California from Mexico in 1848, rancho lands were divided up and generally overrun by Anglo immigration to the area, coinciding with the land boom following the 1849 Gold Rush.

(2) Downtown Oakland

An overview of Downtown Oakland’s cultural and historical setting, organized chronologically, is provided below. A Building Typology Study, provided in Appendix D, is organized thematically by building type and general uses. Together they are intended to provide an overview of the history of downtown and a contextual understanding of the types of historic resources present in the Plan Area. Additionally, a historical overview in the November 2018 Equity Assessment by the Plan’s equity consultant team, “explores and identifies the social, political and geographic changes experienced by Oakland’s most prominent racial groups since its founding.”²⁷

Downtown Oakland sits within lands that were part of the Rancho San Antonio granted to Luis Maria Peralta for his service to the Spanish government.²⁸ The over 40,000-acre rancho included the present-day cities of Oakland, Berkeley, Alameda, and parts of San Leandro and Piedmont. Peralta’s grant was confirmed after Mexico gained independence from Spain in 1822, and the

²⁵ Hendry, George W., and Jacob N. Bowman, 1940. The Spanish and Mexican adobe and other buildings in the nine San Francisco Bay Counties, 1776 to 1850. Ms. on file at the Bancroft Library, University of California, Berkeley, CA.

²⁶ Sher, Sandra, 1994. The Native Legacy of Emeryville. The Journal of the Emeryville Historical Society 5(2), page 9.

²⁷ City of Oakland, Institute for Social, Economic, Environmental, and Educational Design (ISEEED), et al., 2018. Keeping “the Town” in Downtown: An Assessment and Recommendations to Support Racial Equity in the Downtown Oakland Specific Plan, November 29, pages 33-34.

²⁸ Summary of Downtown Oakland Development summarized from Beth Bagwell, Oakland: The Story of a City, 1982; David Weber, Oakland Hub of the West, 1981; Lois Rather, Oakland's Image: A History of Oakland, California, 1972. Marilyn S. Johnson, The Second Gold Rush: Oakland and the East Bay in World War II, 1993; City of Oakland. Historic Preservation: An Element of the General Plan, 1993. Adopted March 8, 1994 and amended July 21, 1998, 1.1 – 1.9.; and City of Oakland, 2019. Downtown Oakland Preliminary Draft Plan, January 16, pages 17-23.

United States honored the land title when California gained statehood. The 1849 Gold Rush brought miners, businessmen, lumbermen, and other speculators to Northern California. Early settlers to the area that became Oakland included Edson Adams, Andrew Moon, and Horace Carpentier, transplanted east coasters, or Yankees, who set up camp on what had been Peralta lands. These Oakland trailblazers soon realized the area's potential and engaged Julius Kellersberger, a Swiss immigrant and former military engineer, to survey the area in 1852 and establish a city grid.

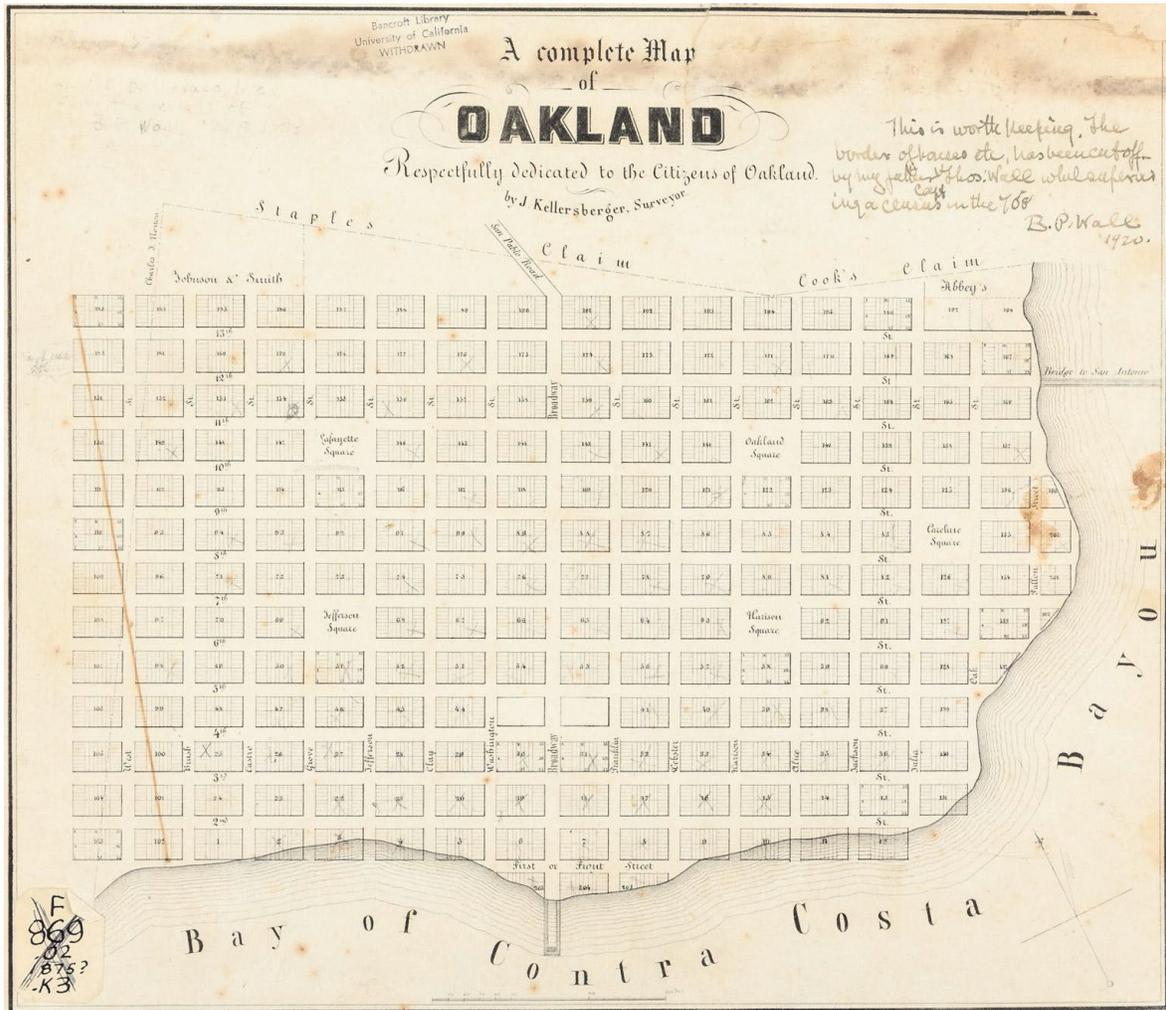
The 1856 Survey of the Coast of the United States depicts the area that would become known as downtown and West Oakland. Although streets had been laid out near Broadway, much of the land remained covered in oak groves and was relatively unpopulated.²⁹ In the 1850s, marshland extended as far north as modern-day 5th Street in several locations and Gibbons Pier, located at the end of 7th Street, was the only indication of the industry to come. Oakland's early growth was concentrated near the wharves and rail lines that eventually transformed the rural outpost into a transportation center for both passenger travel and the exchange of goods.

Broadway was the primary boulevard in the initial plan for Oakland, terminating at a wharf projecting into the estuary. Kellersberger revised his grid in 1857 to include another broad boulevard, Market Street, though Broadway remained the city's primary corridor.³⁰ Kellersberger's plan also accommodated seven public plazas or squares, set within the initial grid. Four of these squares remain in their original locations today, including: Lafayette Square, Jefferson Square, Harrison Square (now Chinese Garden Park), and Oakland Square (now Lincoln Square). Caroline Square (now Madison Park), was relocated and is now bounded by Madison, Jackson, 8th and 9th streets. The six and seventh squares flanked Broadway between 5th and 6th streets but did not remain public space. Kellersberger's map terminated at 14th Street, but he illustrated the intersection of San Pablo Avenue and 14th Street at a diagonal along map's northern edge.

As laid out by Kellersberger, Oakland originally encompassed the area roughly bordered by the estuary to the south, Market Street to the west, 14th Street to the north, and the Lake Merritt Channel to the east. Broadway served as the "Main Street" for the growing town. Early residents, whose numbers were fairly scant in the 1850s, lived near the foot of Broadway close to the estuary. Development moved incrementally towards the Oakland hills and eastward to what would become East Oakland.

²⁹ 1856. Preliminary Chart of Entrance to San Francisco Bay California, under the direction of A. D. Bache, Superintendent of the Survey of the Coast of the United States, Library of Congress.

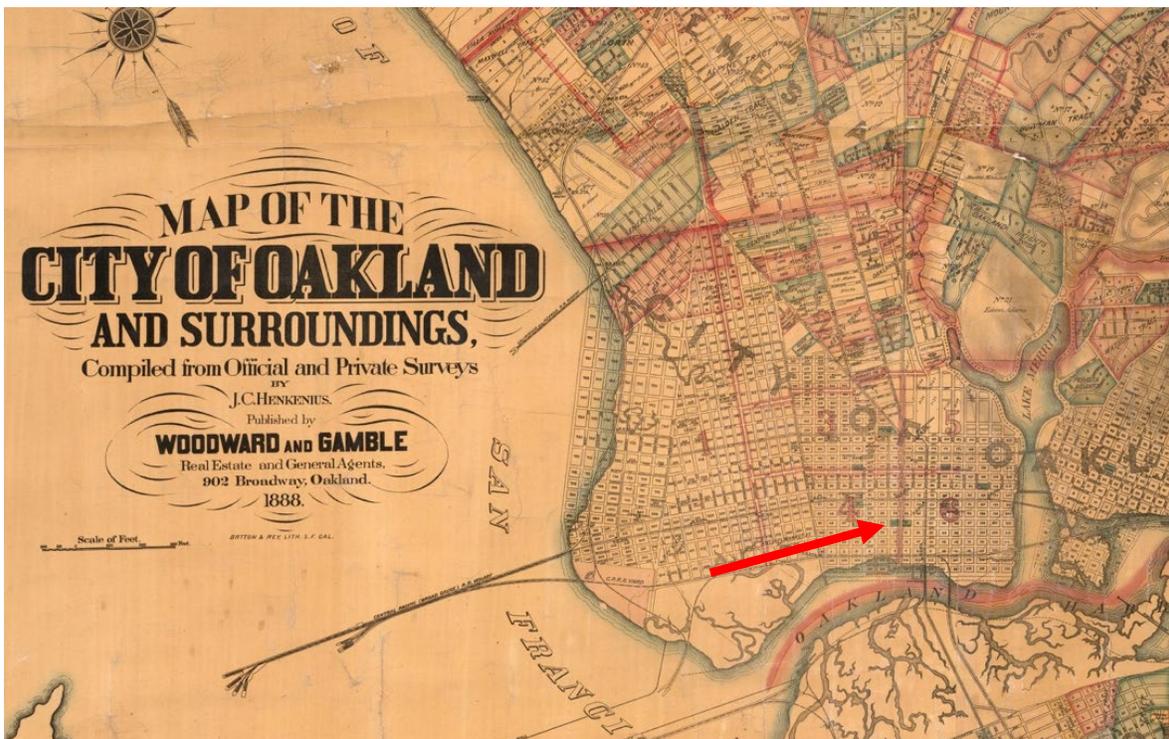
³⁰ Egon Terplan and Magda Maaoui, 2015. "Four Plans that Shaped Oakland's Downtown: Oakland's First 100 Years." *The Urbanist: The Journal of SPUR*. Issue 540, February.



Above: Kellersberger's Plan of Oakland, 1852, showing the regular rhythm of an imposed grid and the location of seven original squares, with the two southern-most unnamed at the time. Four of these remain today in their original locations (Source: Originally Bancroft Library at the University of California, Berkeley; now Warren Hackrotte Map Collection Stanford University.)

Oakland's size and population were expanding by 1869, when the city became the terminus of the completed transcontinental rail service. The railroad brought both additional population and business prospects to Oakland, including African-American men who sought work as porters, and Chinese immigrants who had helped build the railroad and secured more permanent work and housing in Oakland. Irish, German, and British immigrants, as well as transplanted easterners, comprised the majority of Oakland's non-native population during this period. Later, immigrant populations from southern and eastern Europe and areas of the Pacific Rim were attracted to Oakland's growing economy and the region's offerings.

With an accessible harbor, Oakland was strategically located and easily reachable from inland agricultural areas via expanding rail service. A period of rapid population expansion and physical growth followed in the 1870s and 1880s, including the establishment of a civic core, commercial buildings, a working waterfront, and improved infrastructure. An 1888 map of Oakland provides a Victorian-era glimpse of Oakland's expansion at the time. Kellersberger's original city grid had exploded to the west, east, and north, with build-out of the downtown outpacing other areas. The map includes Kellersberger's two previously unnamed public squares that flanked Broadway, labeled Court House and Hall of Justice, while City Hall is marked at San Pablo Avenue and 14th Street.³¹



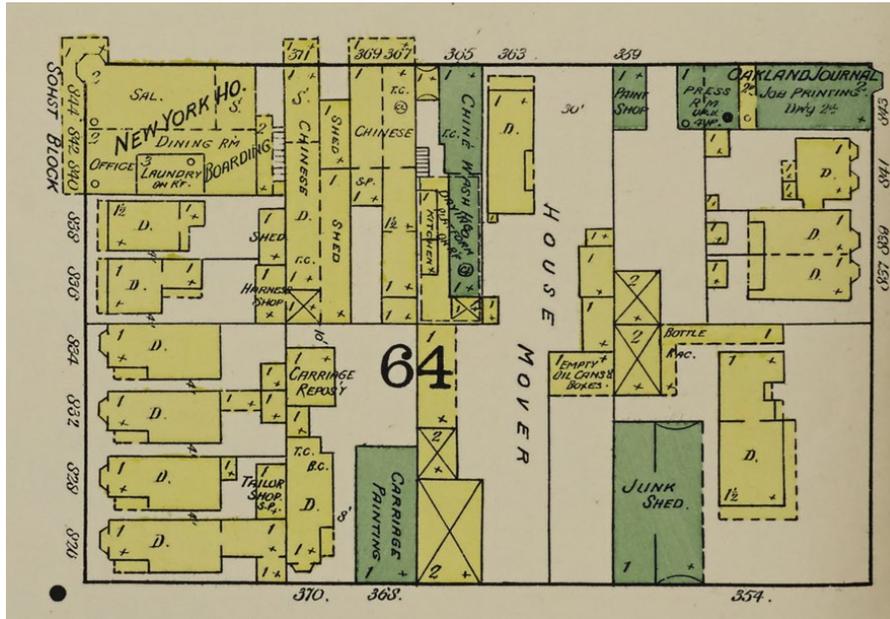
Above: A detail from the 1888 Woodward & Gamble Map of Oakland showing the development of the Oakland city grid by that time. The red arrow points to the base of Broadway. The city had expanded in all directions with significant build out throughout downtown. (Source: David Rumsey Map Collection.)

There is a surviving cluster of small-scale, Victorian-era commercial buildings along 9th Street between Broadway and Washington Street, now known as Victorian Row. A larger area, Old Oakland, comprising approximately six blocks from Broadway to Clay streets and 7th to 10th

³¹ 1888. Woodward & Gamble Map of Oakland. David Rumsey Map Collection.



Above: A portion of sheet 14 of the 1889 Oakland Sanborn Fire Insurance Map illustrating Broadway between 6th and 10th streets, a number of these buildings remain in Old Oakland today. (Source: Library of Congress.)



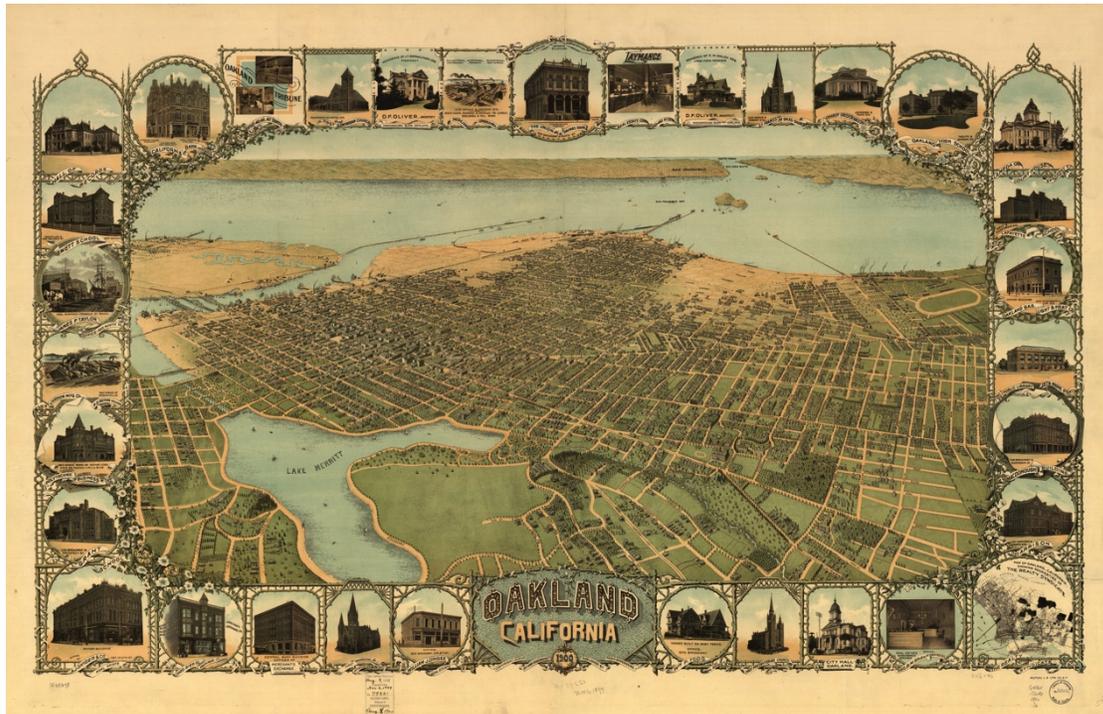
Above: A detail from sheet 5 of the 1889 Oakland Sanborn Fire Insurance Map shows the block bounded by Franklin, 7th, Webster and 6th Streets. Note the several buildings along 7th Street (upper portion of the map detail) are marked "Chinese." (Source: Library of Congress.)

streets, forms a designated S-7 Historic District, as defined in the Oakland Planning Code. Today, this area represents one of Oakland's most significant historic districts, illustrating the city's early commercial development. The 1889 Sanborn Map for the area, bounded by Broadway, 6th, Clay, and 10th streets, shows the extent of building and development that had occurred in Oakland by that year.

During the 19th century, California saw Chinatowns become part of the urban fabric. Los Angeles, Fresno, San Francisco, and Oakland each had multi-block areas with a focused enclave of Chinese residents and businesses. In Oakland, this is evidenced by notations on the 1889 Sanborn Map in the blocks east of Broadway and bounded by 7th, 9th, Webster and Franklin streets.³² After the 1906 San Francisco earthquake, the enclave encompassed a much larger area of downtown, east of Broadway to Madison and from 7th Street extending to 11th and 12th streets. Many Chinese residents, burned out of San Francisco's Chinatown by the 1906 fire, temporarily and permanently relocated to Oakland, adding to Oakland's Chinese population. By the turn of the twentieth century, Oakland was beginning to attract businesses and residents away from its more populous neighbor, San Francisco. This was fueled partially by the growing Key System of electric railways that connected the most densely populated areas of Oakland to the outlying

³² Sanborn Fire Insurance Map 1889 Sheet 5, Library of Congress Collection.

suburbs of Berkeley and Alameda, as well as a ferry service to San Francisco's Ferry Building, started in 1903. Spurred by this growth, in 1905 Mayor Frank Mott hired Charles Mulford Robinson, a major proponent of the City Beautiful Movement, to develop a beautification plan for Oakland. Robinson's plan became an essential tool after the 1906 earthquake, when refugees from San Francisco began pouring into East Bay towns. In 1907, Oakland voters approved parks bonds, and two years later, voted for significant harbor improvements and a new City Hall for the important triangular parcel at 14th Street, San Pablo Avenue, and Broadway.³³



Above: A Birds Eye View of Oakland, 1900, illustrating the relationship of downtown to Lake Merritt, the San Francisco Bay and the Oakland Estuary. Important pre-1906 earthquake buildings are illustrated. (Source: Library of Congress.)

After the earthquake, Oakland experienced a housing boom; bungalows replaced the remaining hayfields in Rockridge, Claremont, and the area north to Berkeley. In 1909, Oakland annexed additional lands including Claremont, Fruitvale, Melrose, Elmhurst, and Lockwood. These accumulated annexations brought Oakland to a total of just over 60 square miles. In 1910, Oakland's population was 150,000, more than double the 67,000 individuals counted in the 1900 Federal Census. Improved transit systems, including long distance rail, suburban and interurban

³³ Egon Terplan and Magda Maaoui, 2015. "Four Plans that Shaped Oakland's Downtown: Oakland's First 100 Years." *The Urbanist: The Journal of SPUR*. Issue 540, February.

lines, ferry service and street amenities, furthered Oakland's residential expansion as travel between Oakland and San Francisco became easier.³⁴

With the improved transit, residential and commercial development in Oakland increased during the 1910s to further accommodate a growing regional population. Hotels were constructed in Downtown Oakland from 1910 to 1915 to house travelers attending the 1915 Panama-Pacific International Exposition hosted by San Francisco. These included a number of single-room occupancy (SRO) hotels that remain today in Downtown Oakland. This post-earthquake development boom defined much of Downtown Oakland, with a number of early landmark skyscrapers, municipal and commercial buildings, transportation-related buildings, and hotels constructed during this era, including: the Broadway Building (1907); Western Pacific Depot (1909-10); City Hall (1911); Kahn's Department Store (now the Rotunda Building, 1912); Auditorium Building (1913); Federal Realty Building (Cathedral Building, 1913); as well as the Hotel Oakland (1910-12), Sutter Hotel (1913), and Harrison Hotel (1914).³⁵

During this period, older Victorian-era houses were subdivided into apartments or rooming houses. In these same residential neighborhoods on the periphery of downtown, such as near Lake Merritt or to the west of Broadway along Grove Street (now Martin Luther King, Jr. Way), density was added through construction of new apartment buildings on lots that had previously been undeveloped or that had accommodated single-family houses. Shopping districts expanded with new and larger department stores, additional hotels were constructed for increasing numbers of visitors, and new commercial centers began to take shape along the busier thoroughfares, such as Telegraph Avenue, San Pablo Avenue, and Broadway.

A defining moment for Oakland was the 1915 publication of Dr. Werner Hegemann's Report on a City Plan for the Municipalities of Oakland and Berkeley. Hegemann, a world-renowned German city planner, was invited to the United States "in 1913, to co-operate with American cities in the promotion of planning projects."³⁶ Hegemann's plan greatly expanded on Robinson's pre-earthquake beautification study. Hegemann recommended changes to the street grid to remedy the long blocks that Kellersberger had laid out between 14th and 19th streets east of Franklin Street, and the lengthy unrelieved blocks between San Pablo and Telegraph Avenues, particularly north of 19th Street. These changes were illustrated by Hegemann in the "Streets" section of the

³⁴ Groff, Garth G., 2011. A Brief History of the Sacramento Northern. Sacramento Northern On-Line. Available at: <http://www.wplives.org/sn/history.html>, accessed November 2014; Western Railway Museum, 2014. History of the Sacramento Northern Railway. Available at: http://www.wrm.org/about/sacramento_northern.htm, accessed November 2014.

³⁵ David Gehbard, 1973. A Guide to Architecture in San Francisco and Northern California; Susan Dinkelspiel Cerny, 2007. An Architectural Guidebook to San Francisco and the Bay Area; and OCHS files and building records.

³⁶ Werner Hegemann, 1915. Report on a City Plan for the Municipalities of Oakland and Berkeley, from preface by Frederic C. Howe.

report.³⁷ Hegemann also provided guidance with regard to harbor improvements, upgrades to the rail system for passengers including long-distance, suburban, and inter-urban travel, and significant investment in parks and playgrounds. The other significant recommendation of the report related to building placement and spacing in downtown to maximize light and air, especially regarding taller commercial buildings. Hegemann illustrated the almost ideal spacing between Oakland's skyscrapers which existed at the time and warned: "If nothing is done to make this state of things permanent the building of new skyscrapers will produce unsatisfactory conditions in regard to light and air, as bad as San Francisco if not New York."³⁸

By World War I, there was an increased number of industrial establishments in both downtown and along Oakland's waterfront, which in turn contributed to enhanced residential construction in areas made more easily accessible by the popularity and use of the automobile. Oakland's population almost topped 300,000 in the 1920s with new residential enclaves built in both the more upper-scale North Oakland and East Oakland, providing housing for industrial workers. In 1923, a graph in the Oakland Tribune Yearbook showed a nine-hundred percent increase in the number of dwellings built over the previous five years.³⁹ The downtown commercial center was further built out during this era with additional department stores or expansions to older stores; two large movie palaces, the Fox and the Paramount; and skyscrapers, including the Tribune Tower and the Art Deco 1928 Financial Center Building. Many of these buildings and those from the post-earthquake boom are within the boundaries of the Downtown Oakland National Register Historic District.

With this additional growth in population, traffic congestion came to the forefront of planning for the growing city.⁴⁰ This included the first discussions of a highway system, with planning consultant Harland Bartholomew encouraging a "significant expansion of automobile routes throughout the East Bay, including a superhighway along the waterfront."⁴¹ Also automobile-related were the small-scale garages, auto sales centers, and dealerships that developed in the 1920s along upper Broadway, near 25th Street.

Like most of the country, Oakland fell into a period of financial instability in the 1930s, with little to no development, especially downtown. Some construction activity was spurred both by the Federal Housing Act (FHA) of 1934 and the construction of the Oakland Bay Bridge, completed in 1936. After the FHA was established, African-Americans and other minority groups were subject

³⁷ Ibid, page 92.

³⁸ Ibid, pages 98-99.

³⁹ Bagwell, Beth, 1982. Oakland: The Story of a City, page 200. Presidio Press, Novato, CA.

⁴⁰ Egon Terplan and Magda Maaoui, 2015. "Four Plans that Shaped Oakland's Downtown: Oakland's First 100 Years." The Urbanist: The Journal of SPUR. Issue 540, February.

⁴¹ Ibid.

to redlining, or exclusionary lending and service-related practices based on race. Ultimately, discriminatory redlining impacted the economic benefits the FHA intended.

It was not until full-scale preparations for and the outset of World War II that Oakland entered its next era of intense industrial, commercial, and economic development. From 1940 to 1945, Oakland's population increased by one third, with a population of nearly 385,000 in 1950. Intensified shipbuilding and harbor activities, including the construction of the Oakland Army Base and the Naval Supply Center, provided much-needed employment for migrating newcomers and established Oakland residents alike.

The Port of Oakland became a major staging area for war operations in the Pacific and a center of wartime production of goods and materials. The economic impacts of World War II on Oakland, and indeed the entire Bay Area, were felt in almost every sector. After the war, Oakland's outlying residential neighborhoods filled with new immigrants, as well as residents leaving the city center. However, this left the older residential areas at the periphery of Downtown Oakland struggling to retain occupants and vulnerable to redevelopment.

In the 1950s, the Port of Oakland sponsored a redevelopment plan to create a destination area at along the waterfront to compete with San Francisco's Fisherman's Wharf, including multiple restaurants and a Boatel, a hotel on the waterfront. The initial Jack London Square development was further enhanced and remodeled in the 1980s. The new development was a departure from the industrial uses that had been the mainstay of Oakland's waterfront. The Waterfront Warehouse Historic District and the Produce Market Historic District, both of which consist of masonry warehouses reflecting the industrial character of the pre-tourist-based waterfront, are situated adjacent to the Jack London development. In recent years, many of these older warehouses have been converted to housing, with some retail and restaurant uses as well.

The full build-out of the East Bay freeway system cut off Oakland's historic industrial waterfront and West Oakland's residential neighborhoods from downtown. Several major highways were constructed in the 1960s through the early 2000s, including the Interstate routes (I)-880, -580 and -980 which significantly disrupted the historic downtown grid and resulted in street modifications to accommodate vehicular entries onto freeways. I-980 is a short highway connecting I-580 and State Route 24, before merging into I-880. Construction on I-980 began in the 1960s but was not completed until 1985. The freeway alignment severed West Oakland from downtown, displaced residents, and resulted in the demolition of housing stock. During construction, Preservation Park, bounded by Castro Street, Martin Luther King Jr. Way, and 14th and 12th streets, was created by assembling a collection of historic, Victorian-era houses impacted by the freeway's construction.

I-880 connects San Jose and Oakland and runs parallel to the Oakland Estuary before curving north to meet I-80. Parts of I-880 opened in 1949 and connected with the San Francisco-Oakland

Bay Bridge in the late 1950s. A portion of the I-880 in West Oakland, known as the Cypress Street Viaduct, collapsed during the 1989 Loma Prieta earthquake. The freeway reopened in July 1997 along a new alignment running parallel to railroad tracks along the western edge of West Oakland. This was the result of fierce community organizing and opposition to the Federal Government's original proposal to reconstruct following the same alignment. Nonetheless, the current I-880 alignment continues to be a physical and visual barrier between downtown and the waterfront.

Physical changes brought by the freeway construction also influenced decisions for the placement of large urban renewal housing projects where downtown meets West Oakland. These projects housed the relocation of thousands of West Oakland residents, but the units that replaced older housing stock could not accommodate everyone displaced. In the early 1970s, the construction of the West Oakland Bay Area Rapid Transit (BART) Station further altered the urban fabric, impacted the population both in numbers and composition, and displaced additional businesses along the west downtown edge.

In the early 1960s, at the north side of the I-880, the County of Alameda invested in new social service buildings and the City of Oakland in a new police administration building, both near the intersections of 6th Street and Broadway. These large-scale, government projects are sandwiched between the elevated I-880 and Old Oakland along 6th Street.

The 1960s also brought the introduction of the BART system to provide alternatives to an increasingly car-dependent Bay Area. Several stations along the BART lines serve Downtown Oakland, including the Lake Merritt, the 12th Street-City Center, and the 19th Street Stations. These stations resulted in changing uses, development of new building types, and modern construction in their immediate vicinity. A new wave of office skyscrapers, and smaller office and financial institution-related buildings cropped up near these important transit hubs at 12th and 19th streets. Similarly, several major projects near Lake Merritt in the 1960s and 1970s further defined the southwest edge of the lake but did not have the same visual impacts as the freeways along the south and west edges of downtown. The Kaiser Center (Welton Beckett and Associates, 1960), the Oakland Museum (Roche Dinkeloo and Associates, Architects, with Dan Kiley Landscape Architect, 1969) and Laney College (Skidmore, Owings & Merrill, 1971) brought a wave of Modern buildings to Lake Merritt's shore.

Shifts in the economy and changes in manufacturing methods left many empty waterfront warehouses and underutilized office buildings in Downtown Oakland by the 1970s. In the late 1980s and into the 1990s, many of the waterfront's older warehouse buildings were reclaimed for office and residential uses, pushing light industrial uses to other areas of Oakland. The 1989 Loma Prieta earthquake resulted in the return of ferry service to Jack London Square, which continues to provide a steady flow of daily riders through the area and further spurred adaptive reuse of warehouses into transit-friendly housing. A new Amtrak Station, completed in 1995 near Jack

London Square, provided additional revitalization to the 1950s tourist hub. The 1990s brought new federal and State office complexes to downtown along Clay Street at 14th Street, infusing additional employees into the downtown center.

A resurgence of construction in Downtown Oakland was promoted under Mayor Jerry Brown's 10K plan to bring 10,000 residents to downtown and to encourage both day-time and night-time uses. The financial downturn resulting from the 2007 banking and mortgage crisis stymied these efforts to bring housing to downtown. However, the upturn in the economy since 2010 and the increasing influence of a technology-based economy in the Bay Area has resulted in both new buildings and the adaptive reuse of older structures in downtown in the last few years. Currently, a new wave of development in downtown has spurred the need for the Specific Plan and for a better understanding of the broader implications of extensive development in Downtown Oakland.

f. Historic and Potential Historic Properties in the Planning Area

The City of Oakland defines an historical resource under CEQA in established and adopted CEQA Thresholds of Significance as updated October 2013. An historical resource meets any of the following criteria:

1. A resource listed in, or determined to be eligible for listing in, the CRHR;
2. A resource included in Oakland's Local Register of historical resources, (defined below) unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
3. A resource identified as significant (i.e., rated 1–5) in a historical resource survey recorded on Department of Parks and Recreation Form 523, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
4. Meets the criteria for listing on the CRHR; or
5. A resource that is determined by the Oakland City Council to be historically or culturally significant even though it does not meet any of the other four criteria listed above.

The CEQA Thresholds continue stating the City of Oakland's Local Register (Historic Preservation Element Policy 3.8) includes the following:

- All Designated Historic Properties (Landmarks, Heritage Properties, Study List Properties, Preservation Districts, and S-7 and S-20 Preservation Combining Zone Properties); and
- Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance.

The above resources are shown in Figure V.E-1 and identified as “Historic Resources per CEQA.” The City of Oakland Areas of Primary Importance (APIs) and Areas of Secondary Importance (ASIs) are also displayed in Figure V.E-1.

Based on review of OCHS records and the City of Oakland GIS data, there are many known and previously identified historic resources within the Plan Area, primarily identified through the OCHS, including the following:

- Approximately 50 officially designated City of Oakland Landmarks;
- Approximately 23 City of Oakland APIs (shown on Figure V.E-1 and V.E-5);
- Approximately 29 City of Oakland ASIs (shown on Figure V.E-1 and V.E-4);
- Approximately 40 NRHP-listed Individual Properties;
- Three NRHP-listed Historic Districts (Downtown Oakland Historic District; Harrison and 15th Streets Historic District; and Oakland Waterfront Warehouse Historic District);
- Two National Historic Landmarks (the Paramount Theater and the Lake Merritt Wild Duck Refuge); and numerous properties that have been surveyed and ranked using the OCHS rankings and included in the Local Register.

2. Regulatory Setting

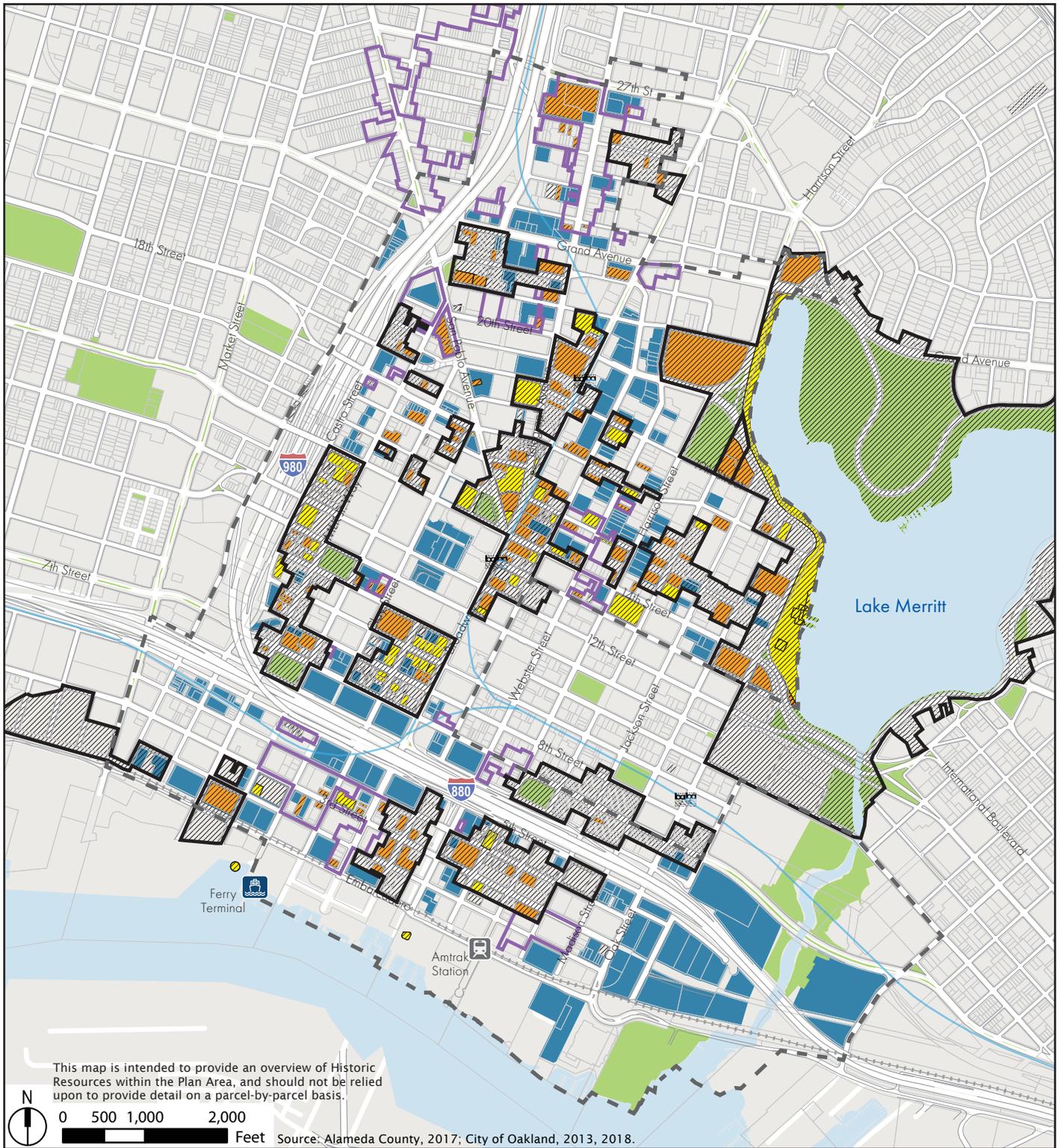
This section discusses applicable regulatory provisions, including Federal and State Regulations, policies from the City of Oakland’s General Plan, Planning Code, and Standard Conditions of Approvals. A detailed discussion of the Plan’s compatibility with the General Plan and other relevant planning policies is discussed in *Chapter IV, Planning Policy*.

a. Federal Government

(1) National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) is the most prominent federal law governing historic preservation. The NHPA establishes guidelines to “preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice.”⁴² The NHPA includes regulations specifically for federal land-holding agencies, but also includes regulations which pertain to all projects that are funded, permitted, or approved by any federal agency and which have the potential to affect cultural resources. Section 106 of the NHPA details a four-step process:

⁴² National Preservation Act of 1966.



Legend

- Downtown Plan Boundary
- Parks
- Opportunity Sites
- City of Oakland Designated Landmark
- BART Station
- BART Line
- Areas of Primary Importance (API)
- Rated 'A' or 'B' on Oakland Cultural Heritage Survey
- Areas of Secondary Importance (ASI)
- Railroad
- Historic Resources per CEQA

Downtown Oakland Specific Plan EIR

Figure V.E-1
Historic Resources in the Plan Area

- Identify and evaluate historic properties in consultation with the Office of Historic Preservation (OHP) and interested parties;
- Assess the effects of the undertaking on properties that are eligible for inclusion in the NRHP;
- Consult with the OHP, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the federal Advisory Council on Historic Preservation (ACHP); and
- Proceed with the project according to the conditions of the agreement.

(2) National Historic Preservation Act National Register Program

The NHPA authorizes the United States Secretary of the Interior to establish a NRHP, an inventory of buildings, structures, objects, sites, and districts significant at the national, State, or local level in American history, architecture, archeology, engineering, or culture. The National Register is maintained by the National Park Service within the federal Department of the Interior. There are approximately 40 individually listed National Register properties in Downtown Oakland, including the Federal Post Office at 201 13th Street, the Oakland Hotel at 260 13th Street, and the Fox Theater at 1807-29 Telegraph Street. There are also three National Register-listed Historic Districts in Downtown Oakland including the Downtown Oakland Historic District, which is a concentrated grouping of buildings in the vicinity of City Hall, including the Rotunda Building (originally Kahn's Department Store), the Cathedral Building, and the Tribune Building. The Downtown Oakland Historic District runs from 17th Street at the north to 11th Street at the south, along Broadway, Franklin Street, and San Pablo and Telegraph Avenues. The two other National Register-listed districts are the Oakland Waterfront Warehouse Historic District and the Harrison and 15th Street Historic District.

(3) National Historic Landmark Program

National Historic Landmarks (NHLs) are nationally significant historic places designated by the Secretary of the Interior because they possess exceptional value or quality in illustrating or interpreting the heritage of the United States. NHLs are given special protection by Section 110(f) of the NHPA. There are only two NHLs in Downtown Oakland: the Paramount Theater and the Lake Merritt Wild Duck Refuge.

(4) Certified Local Government Program

The 1980 amendments to the 1966 NHPA provide for the establishment of a Certified Local Government Program to encourage the direct participation of local governments in the identification, evaluation, registration, and preservation of historic properties within their jurisdictions and to promote the integration of local preservation interests and concerns into local planning and decision-making processes. The Certified Local Government Program is a

partnership among local governments, California's Office of Historic Preservation (OHP), and the National Park Service (NPS), that is responsible for administering the National Historic Preservation Program. Oakland has been part of the Certified Local Government Program since December 1986.

(5) National Environmental Policy Act (NEPA)

NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. The range of actions covered by NEPA is broad but generally includes, but is not limited to, projects that require federal funding, work performed by the federal government, or permits issued by a federal agency. Compliance with NEPA requirements concerning cultural and historic resources may be addressed through compliance with Section 106 of the NHPA, as discussed above. Reports, agreements, and correspondence documenting compliance with Section 106 of the NHPA are provided to the lead governmental agency for a specific proposed action that is subject to NEPA.

(6) Federal Historic Preservation Tax Credits

Since 1976, the federal government, through a joint program of the NPS and the Internal Revenue Service (IRS), has provided 20-percent tax credits for private investment in rehabilitating historic properties. To qualify, a structure must be listed in the NRHP, either individually or as a contributing building in a National Register historic district, or as a contributing building within a local historic district that has been certified by the National Park Service. The project must comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties, as determined by the NPS. Properties officially determined eligible for the National Register have the same protections and the same standing in environmental review as those properties that have already been listed. However, only properties listed on the National Register may qualify for a 20-percent Federal Historic Preservation Tax Credit program. Significant rehabilitation projects in Downtown Oakland have benefited from this federal tax credit, including, but not limited to, the Fox Theater and the Hotel Oakland's rehabilitation as senior affordable apartments.

b. State of California

(1) California Environmental Quality Act (CEQA)

CEQA requires lead agencies in California to consider the effects of proposed discretionary actions or projects on historical resources, defined as those resources meeting the criteria for listing on the CRHR. The definition of historical resources includes buildings, structures, objects, sites, and districts determined to be eligible for or listed on the CRHR, the National Register, or a local register of historic resources. A lead agency may also determine a resource to be significant for purposes of CEQA. An historical resource may be considered historically significant if the resource is 45 years old or older, possesses integrity of location, design, setting, materials,

workmanship, feeling, and association, and meets any of the four criteria for listing on the CRHR, as defined below.

Cultural resources are buildings, sites, humanly modified landscapes, traditional cultural properties, structures, or objects that may have historical, architectural, cultural, or scientific importance. CEQA states that if a project will have a significant impact on important cultural resources, deemed "historically significant," then project alternatives and mitigation measures must be considered that could reduce or eliminate the significant impact.

(2) California Register of Historic Resources (CRHR)

The CRHR was established as the authoritative guide to the state's cultural resources and provides the standards by which properties are considered significant for CEQA purposes. The California Office of Historic Preservation (OHP) also maintains the CRHR through the California Historic Resources Information System (CHRIS) Inventory. Historic properties listed, or formally determined eligible to be listed, on the National Register are automatically listed on the CRHR (PRC Section 5024.1). Additionally, State Historic Landmarks and Points of Interest are automatically listed on the CRHR. Properties designated under local preservation ordinances or identified through local historic resource surveys may be nominated to the CRHR.

For an historical resource to be eligible for listing on the CRHR, it must be significant at the local, state, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (California Public Resources Code).

The CRHR was established as the authoritative guide to California's cultural and historical resources and provides the standards by which properties are considered significant for CEQA purposes. The CRHR program encourages public recognition and protection of resources of architectural, historical, archaeological and cultural significance, identifies historical resources for state and local planning purposes, determines eligibility for state historic preservation grant funding and affords certain protections under CEQA. The CRHR includes resources listed in or formally determined eligible for listing in the National Register; California State Historical Landmarks; and California Points of Historical Interest. The OHP maintains a list of historical resources by county and this is held in the CHRIS Inventory. The OHP has developed a list of

status codes that are used in the CHRIS Inventory to identify resource ratings. A building or structure identified by OHP with a rating of 1 or 2 (meaning on or determined eligible for the National Register) is also considered to be listed on the CRHR. This would include a number of properties in Downtown Oakland that are listed on the NR but are not necessarily designated at the local level. These resources would be considered historic for the purposes of CEQA.

Properties of local significance that have been designated under a local preservation ordinance (i.e., local landmarks), or that have been identified as significant in a local historical resources inventory may also be eligible for listing in the CRHR and are presumed to be significant resources for purposes of CEQA.

(3) California Office of Historic Preservation

The mission of the California Office of Historic Preservation (OHP) and its affiliated commission, the SHRC is to preserve and enhance California's irreplaceable historic heritage as a matter of public interest so that its vital legacy of cultural, educational, recreational, aesthetic, economic, social, and environmental benefits will be maintained and enriched for present and future generations. The California Public Resources Code Section 5024 requires consultation with the OHP when a project may impact State of California-owned historical resources.

(4) California Historical Landmarks

California Historical Landmarks are sites, buildings, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other value. The specific standards now in use for designating such landmarks were first applied in the designation of Landmark #770, the Oroville Chinese Temple. These criteria are as follows:

- The first, last, only, or most significant of its type in the state or within a large geographic region (Northern, Central, or Southern California).
- Associated with an individual or group having a profound influence on the history of California.
- A prototype of, or an outstanding example of, a period, style, architectural movement or construction or is one of the more notable works or the best surviving work in a region of a pioneer architect, designer or master builder.

There are four designated California Historical Landmarks in Downtown Oakland: the site of the College of California, near the northeast corner of Franklin and 13th streets, which moved to

Berkeley in 1873 and became the University of California, Berkeley, (CHL #45); the Paramount Theater at 2025 Broadway (CHL #884); the First Unitarian Church at 685 14th Street (CHL #896); and the Pardee Home at 672 11th Street (CHL #1027).⁴³

(5) California Historical Building Code (CHBC)

The California Historical Building Code (CHBC) (Title 24, Part 8 of the California Code of Regulations, updated January 2017) provides alternative building regulations for permitting repairs, alterations and additions necessary for the preservation, rehabilitation, relocation, related construction, change of use, or continued use of a qualified historical building or structure. For the purposes of the SHBC a qualified historical building or structure is defined as:

any structure or collection of structures, and their associated sites deemed of importance to the history, architecture or culture of an area by an appropriate local or state governmental jurisdiction. This shall include structures on existing or future national, state or local historical registers or official inventories, such as the NRHP, State Historical Landmarks, State Points of Historical Interest, and city or county registers or inventories of historical or architecturally significant sites, places, historic districts or landmarks.⁴⁴

The SHBC is intended to preserve California's architectural heritage by recognizing the unique construction issues inherent in maintaining and adaptively reusing qualified historic buildings. While a State code, the SHBC is administered locally by city or county building officials.

(6) California Health and Safety Code

Section 7050.5(b) of the California Health and Safety code states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her

⁴³ California Office of Historic Preservation. From list of California Historical Landmarks in Alameda County.

⁴⁴ California Building Standards Commission, 2016. 2016 California Historical Building Code. California Code of Regulations, Title 24, Part 8. Effective January 1, 2017.

authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

The County Coroner, upon recognizing the remains as being of Native American origin, is required to contact the NAHC within 24 hours. The Commission has various powers and duties, including the appointment of a Most Likely Descendant (MLD) to the Project. The MLD, or in lieu of the MLD, the NAHC, has the responsibility to provide guidance as to the ultimate disposition of any Native American remains.

(7) California Assembly Bill 52

Signed into law in September 2014, California AB 52 created a new class of resources – tribal cultural resources – for consideration under CEQA. Tribal cultural resources may include sites, features, places, cultural landscapes, sacred places, or objects with cultural value to a California Native American tribe that are listed or determined to be eligible for listing in the CRHR, included in a local register of historical resources, or a resource determined by the lead CEQA agency, in its discretion and supported by substantial evidence, to be significant and eligible for listing on the CRHR. AB 52 requires that the lead CEQA agency consult with California Native American tribes that have requested consultation for projects that may affect tribal cultural resources. The lead CEQA agency shall begin consultation with participating Native American tribes prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report. Under AB 52, a project that has potential to cause a substantial adverse change to a tribal cultural resource constitutes a significant effect on the environment unless mitigation reduces such effects to a less-than-significant level.

(8) Senate Bill 18

As this project consists of a Specific Plan, the City is required to implement Government Code Section 65352.3, which requires local governments to consult with California Native American tribes identified by the NAHC for the purpose of protecting and/or mitigating impacts to cultural places. In accordance with statutory requirements stipulated in SB 18:

Prior to the adoption or any amendment of a general or specific plan, a local government must notify the appropriate tribes (on the contact list maintained by the NAHC) of the opportunity to conduct consultations for the purposes of preserving, or mitigating, impacts to cultural places located on land within the local government's jurisdiction that is affected by the proposed plan adoption or amendment . . . [Supplement to General Plan Guidelines-2005].

c. City of Oakland

(1) Historic Preservation Element of the General Plan

In March 1994, the Oakland City Council adopted the Historic Preservation Element (HPE) of the General Plan (amended July 21, 1998). An HPE is not a required element of a mandated California General Plan, but its adoption demonstrates Oakland's commitment to its historic and cultural environment. The HPE is the definitive guide for historic preservation activities in Oakland and sets goals, objectives, policies, and actions for historic preservation within the City. The HPE creates a far-reaching, multifaceted "Historic Preservation Strategy" that addresses a wide variety of properties and is intended to help revitalize Oakland's districts and neighborhoods. Guiding the HPE are the two broad goals:

Primary Goals of the HPE

Goal 1: To use historic preservation to foster the economic vitality and quality of life in Oakland by:

- Stressing the positive community attributes expressed by well-maintained older properties;
- Maintaining and enhancing throughout the City the historic character, distinct charm, and special sense of place provided by older properties;
- Establishing and retaining positive continuity with the past thereby promoting pride, a sense of stability and progress, and positive feelings for the future;
- Stabilizing neighborhoods, enhancing property values, conserving housing stock, increasing public and private economic and financial benefits, and promoting tourist trade and interest through preservation and quality maintenance of significant older properties;
- Preserving and encouraging a city of varied architectural styles and environmental character reflecting the distinct phases of Oakland's cultural, social, ethnic, economic, political, and architectural history; and
- Enriching the quality of human life in its educational, spiritual, social, and cultural dimensions through continued exposure to tangible reminders of the past.

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 (see definitions of the above in the HPE).⁴⁵

Structure of HPE

The HPE addresses identification, designation, incentives and regulations that related to historic buildings and sites, outlines ongoing preservation-related activities, and puts forward educational information for city residents. The HPE sets out a graduated system of ratings and designations based on OCHS ratings, and these have been used, applied, and implemented to buildings throughout Downtown Oakland.

Incentives and regulations for historic properties are similarly graduated based on the relative importance of the property. The HPE identifies five primary objectives:

1. Objective 1: Identifying properties potentially warranting preservation;
2. Objective 2: Preservation incentives and regulations
3. Objective 3: Historic preservation and on-going city activities;
4. Objective 4: Archaeological resources; and
5. Objective 5: Information and education.

Each of these five objectives is relevant to the Specific Plan because they provide guidance toward minimizing or avoiding impacts to historic resources, and they have the potential to assist in implementation of beneficial historic preservation-related actions. The affiliated policies and actions for these objectives are outlined in the HPE Chapters 3 through 6, with Chapter 7 laying out an Action Program for implementation. Some of the policies and actions as they relate to Downtown Oakland have been previously implemented, while others continue in progress or have yet to be fully implemented.

HPE Relevance to the Specific Plan

The HPE was reviewed as the Downtown Oakland Specific Plan was developed, with a key goal of the Plan spelled out in Goal o6: Land Use - "Develop Downtown in a way that meets community needs and preserves Oakland's unique character." This is followed in the Plan by two Land Use Outcomes:

- *Outcome LU-1 – Development and design serve Oakland's diverse needs, contribute to improved conditions for all, and enhance downtown's authentic, creative, and dynamic local character.*

⁴⁵ City of Oakland, 1994. Historic Preservation: An Element of the Oakland General Plan, page 2-2, March 8. Amended July 21, 1998.

- *Outcome LU-2 – Oakland’s extensive array of historic buildings, cultural enclaves, civic institutions, and landmarks are preserved within downtown’s built environment.*

The following HPE policies are relevant to the development of the Specific Plan.

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 3.2: Historic Preservation and City-Owned Properties. To the extent consistent with other Oakland General Plan objectives, the City will ensure that all City-owned or controlled properties warranting preservation will, in fact, be preserved. All City-owned or controlled properties which may be eligible for Landmark or heritage Property designation or as contributors or potential contributors to a Preservation District will be considered for such designation.

Properties held by the City for purposes of subsequent disposition will be exempt from this policy but shall be subject to Policy 3.3.

Policy 3.3: Designated Historic Property Status for Certain City-Assisted Properties. To the extent consistent with other General Plan Goals, Policies and Objectives, as a condition for providing financial assistance to projects involving existing or Potential Designated Historic Properties, the City will require that complete application be made for such properties to receive the highest local designation for which they are eligible prior to issuance of a building permit for the project or transfer of title (for City-owned or - controlled properties), whichever comes first.

However, Landmark or Preservation District applications will not be required for projects which are small-scale or do not change exterior appearance.

Policy 3.5: Historic Preservation and Discretionary Permit Approvals. For additions or alteration to Heritage Properties 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 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, including advertising the availability of the property for at least ninety (90) days.

Policy 3.8: Definition of "Local Register of Historic 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 Historical Resources:⁴⁶

All Designated Historic Properties, and Those Potential Designated Historic Properties that have an existing rating of "A" or "B" or are located within an Area of Primary Importance.

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. Note: the City of Oakland's current CEQA Thresholds of Significance Guidelines for historical resources are based in part on this policy.

Action 3.8.1: Include Historic Preservation Impacts in City's Environmental Review Regulations. Include Policy 3.8's definitions of "Local Register of Historical Resources" and historic preservation "significant effect" in the City's Environmental Review Regulations.

Amend the regulations to include specific measures that may be considered to mitigate significant effects to a Historical Resource. Measures appropriate to mitigate significant effects to a Historical

⁴⁶ Any property listed on the California Register of Historical Resources or officially determined to be eligible for listing on the California Register of Historical Resources is also considered a "Historical Resource" pursuant to Section 21084.1 of CEQA.

Resource may include one or more of the following measures depending on the extent of the proposed addition or alteration.⁴⁷

Modification of the project design to avoid adversely affecting the character-defining elements of the property.

Relocation of the affected Historical Resource to a location consistent with its historical or architectural character.

If the above measures are not feasible, then other measures may be considered, including, but not limited to, the following:

1. Modification of the project design to include restoration of the remaining historic character of the property.
2. Modification of the project design to incorporate or replicate elements of the building's original architectural design.
3. Salvage and preservation of significant features and materials of the structure in a local museum or within the new project.
4. Measures to protect the Historical Resource from effects of on-site or other construction activities.
5. Documentation in a Historic American Buildings Survey report or other appropriate format: photographs, oral history, video, etc.
6. Placement of a plaque, commemorative marker, or artistic or interpretive display on the site providing information on the historical significance of the resource.
7. Contribution to a Façade Improvement Fund, the Historic Preservation Revolving Loan Fund, the Oakland Cultural Heritage Survey, or other program appropriate to the character of the resource.

Policy 3.11: Historic Preservation and Seismic Retrofit and Other Building Safety Programs. The City's building safety programs, including seismic retrofit programs, will seek to preserve existing or Potential Designated Historic Properties and their Character-Defining Elements. Where changes to such elements are unavoidable to achieve code compliance or other City-mandated modifications, the City will encourage owners to design the changes in a manner which minimizes visual impacts.

Prevailing codes for the City's building safety programs when applied to existing or Potential Designated Historic Properties will be the Oakland Building Code; the Uniform Code for Building Conservation where permitted under State law; and, for qualified historical buildings, the State Historical Building Code.

⁴⁷ Per the provisions of CEQA, determination of whether mitigations are adequate to reduce a significant effect to a Historical Resource to a level less than significant will be determined by the Lead Agency on a case by case basis.

Rating System Established in the Historic Preservation Element

The Rating System, adopted within Oakland's Historic Preservation Element, is shorthand for the relative importance of properties.⁴⁸ The system uses letters A to E to rate individual properties and numbers 1 to 3 for district status. Individual properties can have dual ("existing" and "contingency") ratings if they have been remodeled, and if they are in districts, they can be contributors, non-contributors, or potential contributors. In general, A and B ratings indicate landmark-quality buildings. The rating system is summarized, with some examples, below.

- A: Highest Importance: Outstanding architectural example or extreme historical importance (about 150 properties total).
- B: Major Importance: Especially fine architectural example, major historical importance (about 600 total).
- C: Secondary Importance: Superior or visually important example, or very early (pre-1906). Cs "warrant limited recognition (about 10,000 total).
- D: Minor Importance: Representative example. About 10,000 Ds are PDHPs, either because they have a higher contingency rating ("Dc") or because they are in districts ("D2+").
- E: Of no particular interest, *, or F: Less than 45 years old or modernized. Some Es, Fs, and *s are also PDHPS because they have higher contingency ratings or are in districts.
- Contingency Ratings (lower-case letter, as in "Dc" or "Fb"): potential rating under some condition, such as "if restored" or "when older" or "with more information."
- District Status (numbers):
 - "1": In an Area of Primary Importance (**API**) or National Register quality district.
 - "2": In an Area of Secondary Importance (**ASI**) or district of local interest.
 - "3": Not in a historic district.

Within districts, resources are identified as contributing, noncontributing, or potential contributors.

Potential Designated Historic Properties (PDHPs)

The City considers any property that has at least a contingency rating of C ("secondary importance") or contributes or potentially contributes to a primary or secondary district as

⁴⁸ City of Oakland, 2019. Historical and Architectural Rating System. Available at: <http://www2.oaklandnet.com/government/o/PBN/OurServices/Historic/DOWD009155>, accessed August 27, 2019.

warranting "consideration for possible preservation." If they are not already designated, all properties meeting these minimum significance thresholds are called Potential Designated Historic Properties (PDHPs).

PDHPs are a large group, constituting a fifth of the buildings in Oakland. They are meant to be "numerous enough to significantly influence the city's character." Properties with contingency ratings are classified as PDHPs to highlight their value as restoration opportunities. District contributors and potential contributors are classified as PDHPs to promote preservation of Oakland's distinctive districts and neighborhoods.

(2) Local Register of Historic Resources

In 1998, following changes in California law, the Historic Preservation Element was amended to create a category called the Local Register of Historic Resources. This includes Designated Historic Properties (City landmarks and districts, as well as properties designated under State and Federal programs) plus the most important PDHPs: those that have existing ratings of A or B or are in Areas of Primary Importance. Under certain circumstances, demolition or incompatible alteration of these properties cannot be carried out unless an Environmental Impact Report demonstrates that there are no feasible preservation alternatives and identifies mitigations to make up for the loss of a historic resource.

(3) Land Use and Transportation Element (LUTE) of the General Plan

There is one relevant General Plan LUTE policy as it relates to vacant and underutilized buildings in the Specific Plan boundaries:

Policy D6.2: Reusing Vacant or Underutilized Buildings. Existing vacant or underutilized buildings should be reused. Repair and rehabilitation, particularly of historic or architecturally significant structures, should be strongly encouraged. However, when reuse is not economically feasible, demolition and other measures should be considered.

(4) City of Oakland Planning Code

Central Business District (Section 17.136.055)

Special Regulations for Historic Properties in the Central Business Zones (Section 17.136.055). This section of the code establishes required findings applicable to alterations, additions, and new construction that would involve Designated Historic Properties or Potential Designated Historic Properties in Central Business District zones. Proposed development on subject sites must ensure that the character-defining elements of a historic property are not adversely affected by the proposed project, and that such projects would be visually compatible with surrounding historic properties (if located in a historic district).

Review by Landmarks Board in Certain Cases (Section 17.136.060)

Under this provision of the Planning Code, applications for regular design review in the S-7 zone, or on a designated Landmark site, are to be referred to the Landmarks Board for its recommendations. The Director of City Planning may also refer projects involving regular design review in the S-20 zone, or when a proposed addition or alteration will have a significant effect on a property's character-defining elements that are visible from a street or other public area. As noted above in the Physical Setting, the Plan Area includes many designated City Landmarks and two S-7 designated historic districts, Old Oakland and Preservation Park.

Special Regulations for Designated Landmarks (Section 17.136.070)

This section stipulates that alterations and new construction must not adversely affect the exterior features of a Landmark, or the special character, interest, or value of the Landmark or its setting. All projects involving Landmarks should conform, if possible, with the Design Guidelines for Landmarks and Preservation Districts as adopted by the City Planning Commission and/or the Secretary of the Interior's Standards for the Treatment of Historic Properties. The Director is given the authority to decide whether or not project proposals conform to these regulations. The regulations also stipulate that the owner, lessee, or other person responsible for a designated Landmark has a duty to maintain the property and keep it in good condition.

Demolition (Section 15.36 and Section 17.136.070)

Section 15.36 of the City of Oakland Municipal Code specifies the process and approval of Demolition Permits. Demolition is defined as "decimating, razing, ruining, tearing down or wrecking of any facility, structure or building covered by this chapter. As used herein, the word "demolition" shall include any partial demolition and any interior demolition affecting more than ten percent of the replacement value of the structure as determined by the Building Official."

Section 17.136.075 of the City of Oakland Planning Code defines regulations for demolition or removal of CIX-1A zoned properties, Designated Historic Properties, and Potential Designated Historic Properties.

On January 8, 2015 the City of Oakland adopted "Demolition Findings," that relate to Section 17.136.075 and three categories of historic resources:

- Category I – Any Landmark; Heritage Property; property rated "A" or "B" by the Oakland Cultural Heritage Survey; or Preservation Study List Property. This category excludes any property that falls into Category II.

- Category II – Properties in an S-7 or S-20 zone or an Area of Primary Importance. Any building, including those that do not contribute to the historic quality of the district, fall into this category.
- Category III – Properties rated “C” by the Oakland Cultural Heritage Survey or contributors to an Area of Secondary Importance. This category excludes any property that falls into Category II.

Findings related to design, economic viability, building soundness and safety, building maintenance, building appraised value, public benefits, and sustainability are required during Design Review for the City to approve demolition of historic resources defined within each of the above three categories.

S-7 and S-20 Preservation Combining Zone (Sections 17.84 and 17.100B)

S-7 and S-20 Preservation Combining Zone (Sections 17.84 and 17.100B of the Planning Code). The S-7 and S-20 Preservation Combining Zones are the City’s historic preservation zoning districts or historic districts. Areas eligible for S-7 designation are those having “special importance due to historical association, basic architectural merit, or the embodiment of a style or special type of construction, or other special character, interest, or value.” District boundaries can be established by historic tract boundaries and historic natural or man-made features that shaped the district’s development (e.g., the shoreline, railroad tracks), by later intrusion or demolition, or by practical considerations such as existence of an interested group of applicants. The S-20 zone is similar to the S-7 zone, but is designed for larger areas, typically with a large number of residential properties that may not be individually eligible for landmark designation but as a whole constitute a historic district. Demolition and design regulations for S-7 and S-20 properties are similar to those for landmarks. In the S-20 zone, most design review follows ordinary City processes, with potential referral to Landmarks Preservation Advisory Board. Old Oakland and Preservation Park are the only Preservation Combining Zones in the Specific Plan boundary; both are designated S-7 Districts.

(5) City of Oakland Standard Conditions of Approval

The City’s SCAs that are relevant to cultural resources are listed below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-CULT-1: Archaeological and Paleontological Resources – Discovery During Construction (#33)

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 applicable to the expected resource, the data classes the resource is expected to possess, and how 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 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.

When Required: During construction.

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-CULT-2: Archaeologically Sensitive Areas – Pre-Construction Measures. (#34)

Requirement: The project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision B (Construction ALERT Sheet) concerning archaeological resources.

Provision A: Intensive Pre-Construction Study.

The project applicant shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive archaeological resources study is to identify early the potential presence of history-period archaeological resources on the project site. At a minimum, the study shall include:

- a. Subsurface presence/absence studies of the project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources.
- b. A report disseminating the results of this research.

- c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources.

If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction and prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction.

Provision B: Construction ALERT Sheet.

The project applicant shall prepare a construction "ALERT" sheet developed by a qualified archaeologist for review and approval by the City prior to soil-disturbing activities occurring on the project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor, any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil-disturbing activities within the project site.

The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop and the City's Environmental Review Officer contacted in the event of discovery of the following cultural materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks); concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted in a visible location at the project site.

When Required: Prior to approval of construction-related permit; during construction

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-CULT-3: Human Remains – Discovery During Construction. (#35)

Requirement: Pursuant to CEQA Guidelines section 15064.5l(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 I 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-CULT-4: Property Relocation. (#36)

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning (including Oakland Cultural Resource Survey)

Monitoring/Inspection: N/A

4. Impacts, Standard Conditions of Approval and Mitigation Measures

This section analyzes and describes potential environmental impacts related to cultural and historic resources that could result from the implementation of the goals and policies set forward in the Specific Plan, as well as reasonably foreseeable development expected to occur under the Plan's implementation. Mitigation measures to assist in reducing impacts are presented following the analysis.

a. Thresholds of Significance

The City of Oakland has established specific CEQA thresholds as they relate to historic and 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 an historical resource as defined in CEQA Guidelines section 15064.5.14. 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. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
4. Disturb any human remains, including those interred outside of formal cemeteries.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City’s adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City’s thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City’s thresholds.

b. Analysis Approach and Plan Policies

To understand how the Specific Plan may impact resources, Plan policies related to historic and cultural resources were identified. They are categorized by likely beneficial results and potential to impact historical and cultural resources.

Potentially Beneficial Plan Policies

The Specific Plan seeks to encourage and accommodate housing and employment growth within the Plan Area through amendments to the General Plan, as well as changes to height and intensity and development on opportunity sites, and key transformational opportunity areas. The Plan also includes goals that respect and enhance neighborhood character, encourage adaptive reuse of older buildings, and promote diverse cultural assets in downtown. These policies (presented in order they appear in the Public Review Draft Plan) include:

Policy E-2.3: Develop and continually update requirements or incentive options for new development to provide affordable space for arts, community service/nonprofit organizations, and small, local, culturally-specific businesses.

Policy E-2.5: Review and revise zoning and other City requirements to allow custom manufacturing uses in ground-floor commercial spaces so that tenants can make and sell products in the same space.

Policy E-2.6: Activate vacant storefronts and empty lots with retail and arts uses by supporting “pop-up” uses that temporarily occupy these spaces. Explore establishment of a formal program to identify vacant spaces and coordinate pop-ups through a City registry and referral process; explore development of a temporary use classification in the zoning code; evaluate and revise City requirements as needed.

Policy E-2.7: Ensure City policies and actions maintain sufficient industrial space downtown to accommodate user needs—especially maintaining downtown’s unique existing strengths in providing space for small-scale industrial uses such as custom manufacturing, production, arts and distribution. As described in the land use chapter, maintain industrial uses in specific areas near port and freight infrastructure.

Policy E.2.12: If a new ballpark and related development occur at Howard Terminal, ensure that the site design minimizes impacts on existing businesses and Port of Oakland operations, particularly in the neighboring West Oakland Specific Plan’s industrial preserve area.

Policy E-2.13: Pursue establishment of additional arts and culture districts in downtown, similar to BAMBD; potential districts could include a Chinatown Cultural Heritage District, KONO 25th Street Art + Garage District, and Jack London Maker District. Districts should only be established where there is local support.

Policy E-2.14: Pursue additional funding and restructure the façade and tenant improvement program to focus on assisting businesses and nonprofit organizations that meet criteria for income and location in established cultural districts.

Policy E-3.15: Partner with local businesses and the Building Bureau to enhance the physical accessibility of public-serving retail, workplaces and other spaces through application of “universal design” principles.

Policy H-1.9: Encourage the development of more commercial hotels downtown to relieve pressure to convert permanent housing units and SRO hotels to short-term tourist rentals.

Policy H-2.1: Continue to purchase and rehabilitate downtown’s residential or single-room occupancy hotels (SROs) as income-restricted affordable housing, as funding and purchase opportunities arise.

Policy H-2.2: Continue to partner with and fund nonprofit housing organizations to acquire and rehabilitate SROs in downtown; consider adapting the city’s notice of funding availability (NOFA) scoring criteria for funding applications to prioritize downtown sites for some funds.

Policy H-2.14: Ensure habitability standards for residents of affordable and market rate housing developments.

Policy LU-2.3: Establish a Cultural Districts Program and use the zoning regulations developed in support of such a program to both require and incentivize specific uses identified by the community as priorities in those areas.

Policy C-1.2: Provide support for the Black Arts Movement and Business District (BAMBD) and promote the district with special urban design elements and marketing materials.

Policy C-1.3: Strengthen and connect downtown's cultural assets and districts by investing in marketing and branding and a network of public spaces and culturally-relevant streetscape elements, such as wayfinding, signage, historical markers and public art.

Policy C-1.4: Encourage or incentivize new developments and infrastructure projects to seek out local culturally specific artisan producers and industrial fabricators to supply district-appropriate furniture, lighting, railing, textiles, art work, etc.

Policy C-1.6: Adopt regulations that help preserve and adapt historic buildings downtown, in order to help retain and create new spaces for arts and culture uses.

Policy C-1.7: Prioritize the capital improvement needs of the Malonga Casquelourd Center for the Arts, including the theater facility, in the City's upcoming budget cycles and Capital Improvement Program (CIP) planning processes.

Policy C-1.14: Expand & enhance the Oakland Cultural Asset Map (2018), created by the City of Oakland Department of Cultural Affairs.

Policy C-2-2: Invest in the creation of new and improved public spaces that can be used to host festivals and cultural gatherings, and that feature public art.

Policy C-3-6: Incentivize the use of privately-owned, vacant, or underutilized buildings as temporary affordable art or social enterprise space.

Policy LU-2.1: Draft and adopt an Adaptive Reuse Ordinance that facilitates the reuse of older and underutilized buildings by relaxing typical building and zoning requirements and by providing flexibility in the approval and permitting process when buildings are converted to new uses. Consider also applying the CHBC to buildings in APIs.

Policy LU-2.2: Study and develop an updated Transfer of Development Rights (TDR) program that will assist in overall preservation efforts downtown.

Policy LU-2.3: Establish a Cultural Districts Program and use the zoning regulations developed in support of such a program to both require and incentivize specific uses identified by the community as priorities in those areas

Policy LU-2.4: Study updating the City's demolition findings to facilitate new compatible development near the outer edges of fragmented Areas of Primary and Secondary Importance. This would require tailored design guidelines to help ensure architectural compatibility.

Potentially Adverse Plan Policies

While the Plan includes several policies to protect historic resources and neighborhood character, the Plan's primary goals are to create opportunities for economic growth and economic security for all Oaklanders and ensure sufficient housing is built and retained to meet the varied needs of current and future residents. Development associated with achieving the Plan's economic growth and housing policies consequently could adversely impact individual historic resources and/or historic districts as discussed below. The Plan accomplishes these growth and housing goals by increasing height limits and intensity in some areas and replacing existing general plan designations. The Plan also identifies opportunity sites for future development. If these Plan goals and policies are implemented as envisioned, then they could result in significant unavoidable impacts to historic and cultural resources. Although as is often the case with plan policies, many of the Plan's policies have the potential for both positive as well as adverse outcomes. This is reflected in some policies that appear in both the list above as well as the list below, as they may result in significant impacts to historic and cultural resources.

These policies (presented in order they appear in the Public Review Draft Plan) include:

Policy E-2.1: Prioritize future office development at sites in this Plan as well as located for office use (while still encouraging office development to occur elsewhere in downtown). Primary sites are located near BART and existing office concentrations at City Center and the Lake Merritt office district.

Policy E-2.2: Promote density and a mix of transit-supportive uses at regional transportation hubs, such as BART stations Amtrak stations, ferry terminals, and major AC Transit multi-route stops.

Policy E-3.15: Partner with local businesses and the Building Bureau to enhance the physical accessibility of public-serving retail and other spaces through application of "universal design" principles.

Policy H-1.7: Ensure that a mix of market-rate and income-restricted housing is constructed in downtown. Target creation of between 4,365 and 7,275 (aspirational target) affordable housing units including units designated to accommodate larger families out of a total housing production target of 29,100 new units. The target breakdown of new affordable units by income range, based on the City's 2015-2023 RHNA, should be: 15% extremely low-income, 15% very low-income, 30% low-income and 40% moderate income

Policy H-1.2: Leverage the city's inventory of publicly-owned land in a manner that supports housing affordability for Oakland residents.

Policy H-1-11: As part of the updates to zoning and development incentive program, adjust the zoning in identified areas of opportunity to create new high-intensity, mixed-use neighborhoods.

Policy H-1-13: Investigate passage of policies requiring a high standard of accessibility retrofits during remodels of existing buildings/units, and/or adjust requirements for new residential development in order to strengthen accessibility. This change could potentially include creation of a citywide universal design ordinance or amendment of existing citywide zoning/building codes to strengthen accessibility requirements (consider using the City of Alameda’s visibility and universal design ordinance as a model)

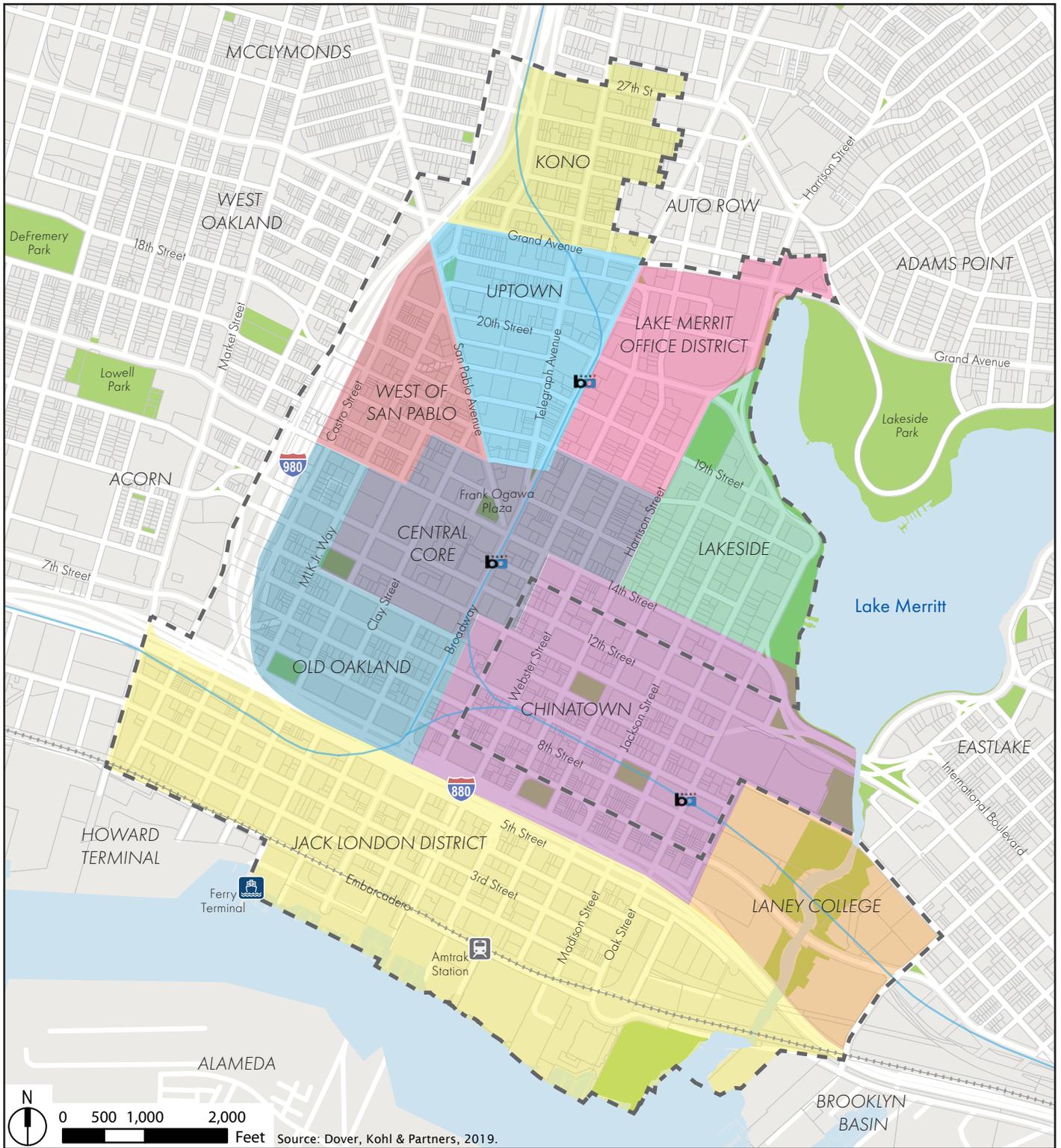
Policy LU-1.2: Encourage incremental development to fill in gaps in the existing urban fabric, while also identifying opportunities for larger and more transformative developments.

(2) Plan Vision and Development

In addition to the policies listed above, the Specific Plan provides a future vision for each of the ten sub-areas of downtown, shown in Figure V.E-2.⁴⁹ This includes a discussion regarding a future vision for the I-980 Corridor. Given the complexity of implementing such a vision, this is not fully analyzed in either the Specific Plan or the EIR; consideration of the I-980 Corridor would need additional environmental review at a future date. The Specific Plan puts forward possible height and floor area ratio (FAR) changes, as well as density changes and identifies potential opportunity sites for each of the ten sub-areas, discussed below and shown in *Chapter III, Project Description*, Figure III-3. The identified opportunity sites, height, and intensity changes (height, FAR and density) put forward in the Specific Plan also have the potential to impact cultural and historical resources. Figure V.E-3 shows vacant parcels and existing buildings on opportunity sites.

To determine where these opportunity sites may potentially conflict with known individual historic resources, APIs and ASIs, and National Register districts, a series of working maps comparing these properties with potential opportunity sites was created using available GIS data from the City of Oakland. Additionally, known historic resources were viewed with overlays of height, FAR and density increases to determine how changes in building’s heights and intensities would potentially impact historic resources. Areas of proposed differences are shown in *Chapter III, Project Description*, Figures III-9, III-10, and III-11 for FAR, density and height. Lastly, it is assumed that some future projects in Downtown Oakland would involve additions to historic buildings or buildings added to parcels that contain historic buildings. It is assumed that if these projects are executed per the *Secretary of the Interior’s Standards for the Treatment of Historic Properties*, they would limit impacts to the existing historic resources. However, these projects

⁴⁹ City of Oakland, 2019. Downtown Oakland Specific Plan – Public Review Draft Plan, August.

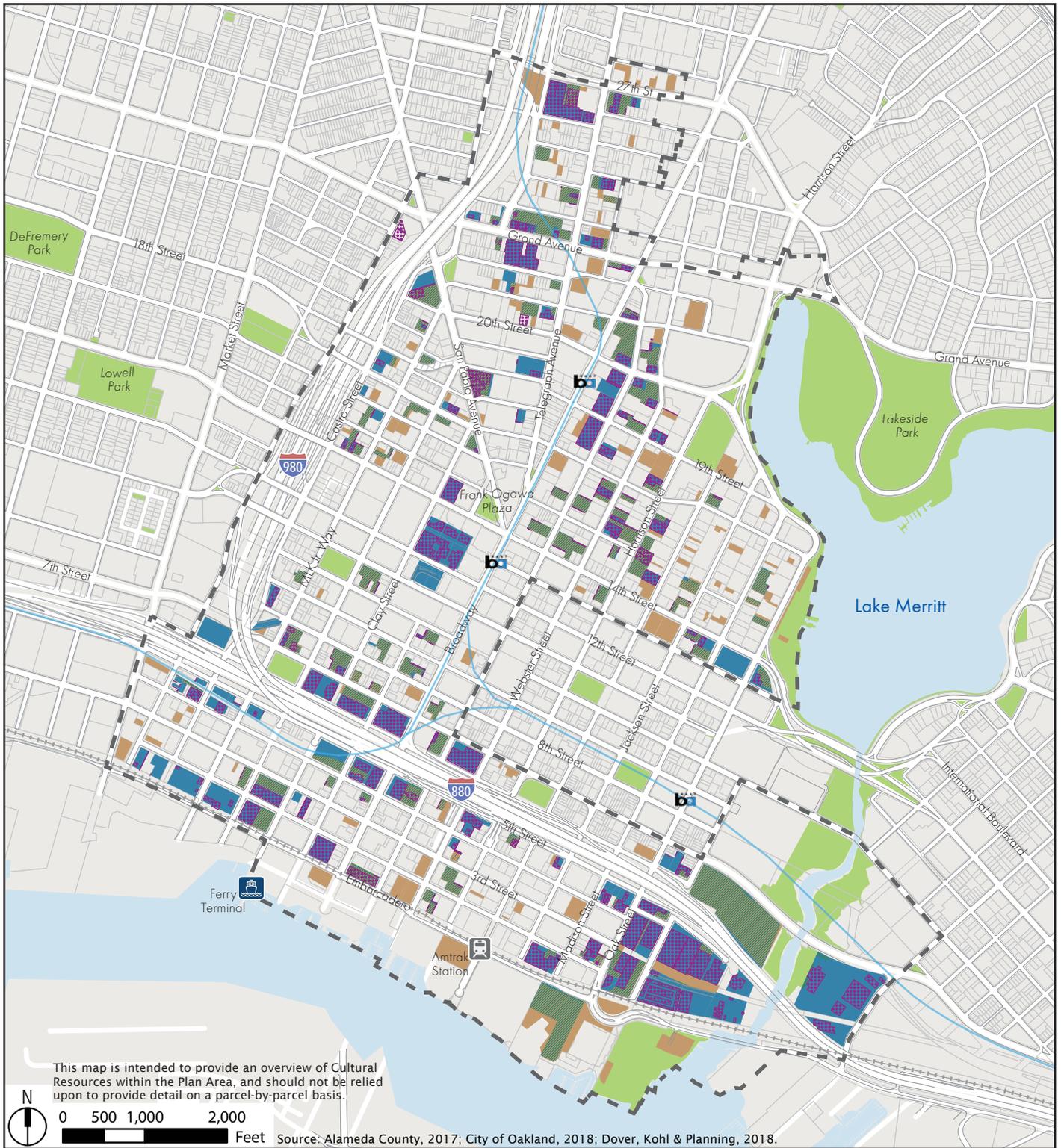


Legend

- Downtown Plan Boundary
- Parks
- BART Station
- BART Line
- Railroad

Downtown Oakland Specific Plan EIR

**Figure V.E-2
Planning Sub-Areas Map**



Legend

- Downtown Plan Boundary
- Parks
- Existing Building Footprint within an Opportunity Site
- BART Station
- Opportunity Sites
- Vacant or Underdeveloped Lot
- BART Line
- Vacant or Underdeveloped Lot on an Opportunity Site
- Railroad

Downtown Oakland Specific Plan EIR

Figure V.E-3
Vacant Parcels and Existing Buildings on Opportunity Sites

would need to be individually evaluated based on the program proposed and extent of the intervention on each site.

Only avoidance of direct impacts (i.e., demolition or substantial alteration) to historic resources would reduce any potential impacts to historic resources to a less than significant level. If demolition or substantial alteration of historically-significant resources is identified by the City as the only feasible option for development that implements a component of the Specific Plan, then these impacts would be considered significant and unavoidable.

Given the scope and scale of the Specific Plan, it seems highly likely that some previously identified historic resources would be impacted through the implementation of the Plan and its associated development. In addition to broader environmental review for the Plan, it would most likely be necessary to complete some level of environmental review on a project-specific basis, as individual projects on the identified opportunity sites and other sites are developed. One of the purposes of this EIR is to provide environmental analysis for future projects, which may use this EIR as a baseline informational document as well as be relied upon as a framework to determine the level of impacts.

Appendix D of this EIR includes the Downtown Oakland Historic Building Typology Study. While a complete re-inventory of the entire downtown area was not feasible, the Typology Study defines prominent building types, provides examples, identifies geographic areas, describes the frequency or rarity of each type, and puts forward an assessment of threats to each type. The Typology Study is organized by building type and also by significance or use theme; for instance, small-scale masonry commercial or industrial buildings, or government or institutional buildings, or wood-frame, Victorian-era residential buildings. The study also includes building types related to the more recent past, as developed in the post-World War II era. The Typology Study is intended to be another informational tool for understanding the extent and location of historic resources in Oakland's downtown. It is not intended to be a replacement for additional inventory or a full assessment of previously unevaluated historic resources.

To determine where areas of impact to cultural and historical resources may potentially occur, if the Specific Plan is implemented as envisioned, a review of proposed opportunity site locations, proposed height and intensity changes, and the vision section for each of the ten Plan Area neighborhoods is discussed below. As the Plan noted, there is a "distinct vision for each of downtown's unique neighborhoods and districts, where different scenarios applying land use and zoning concepts, opportunity sites, transportation alternatives and public realm improvements

will realize these respective visions.”⁵⁰ It is understood that opportunity sites represent only a portion of sites that may be redeveloped in the future. Through the Plan process, opportunity sites are identified as the following:

- Infill sites, which are vacant land (including surface parking lots);
- Underutilized sites, or sites with buildings that could better contribute to the public realm;
- Major redevelopment opportunities are identified that are at the periphery of the planning boundary and beyond the scope of the Plan, including Howard Terminal and reimagining the I-980 Freeway, both of these projects would require separate or additional environmental review.⁵¹

To provide further analysis, the Building Typology Study in Appendix D of this EIR identifies buildings that are rare or threatened. These buildings were taken into consideration in the neighborhood vision analysis below. The following analysis is organized by the planning sub-areas identified in the Specific Plan and the discussion appears in the same order as the visioning for each sub-area. District photos are included in the area-by-area discussion in Section F, Aesthetics.

Central Core

Existing Conditions

The Central Core is the commercial core of Oakland, with major downtown thoroughfares of Broadway, Telegraph and San Pablo Avenues, radiating from the city center and has development standards that fit its intensity. Much of the central core does not have limits to height, with existing FAR of 20.0 and densities of 90 square feet per dwelling unit. This area of downtown includes a concentration of older buildings which house government, corporate and private offices, retail, and other services. The Central Core contains some of Oakland’s most identifiable historic landmarks and includes a collection of early 20th century skyscrapers, including: Oakland’s first steel-frame skyscraper, the Union Savings Bank Building of 1903; Kahn’s Department Store, 1912, now called the Rotunda Building; the Federal Realty Building of 1913, often called the Cathedral Building; and the Oakland Tribune Tower, completed in 1922. Along the southern edge of the sub-area is the Oakland Convention Center. A large number of Oakland’s older hotels, many now used as SROs, are found in the Central Core. Several significant modern-era office towers are found in this area of downtown, including the 1958 tower by architects Stone, Mulloy, Marraccini & Patterson at 1330 Broadway, the first International-Style

⁵⁰ Ibid, page 7.

⁵¹ Ibid, page 186.

high rise in the East Bay, and the later Corporate Modern Clorox Building at 1221 Broadway (Cesar Pelli with Gruen Associates). The Central Core also conveys the legacy of the 1966 Central District Plan, which demolished twelve blocks to accommodate the City Center, Convention Center, and Federal Building, and in doing so altered the historic street grid.

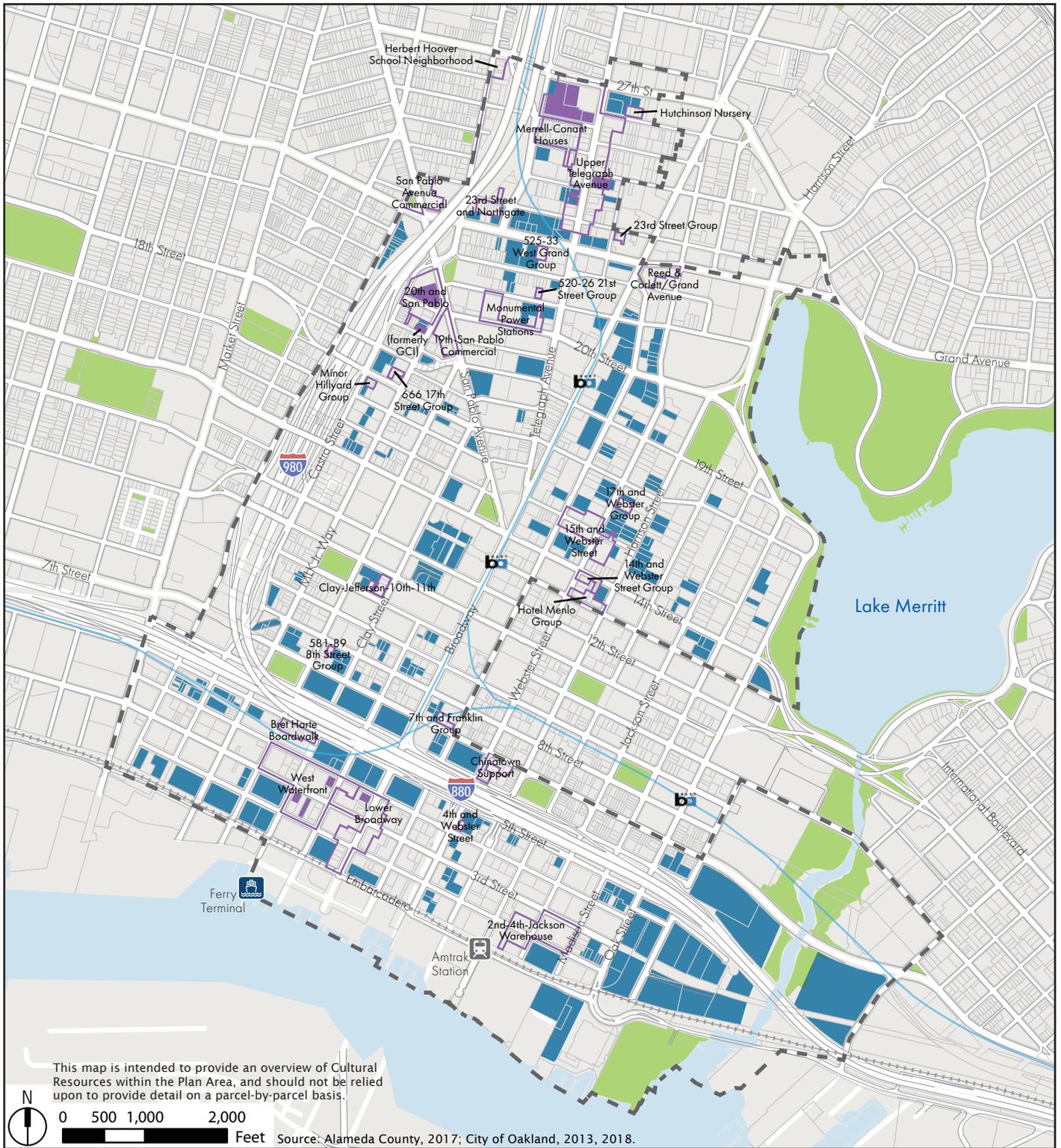
The Central Core includes the Downtown Oakland and the Harrison and 15th Streets National Register Historic Districts and several APIs (Downtown Historic, Coit Building Group (which is also included in the Harrison and 15th Street National Register Historic District), Leamington Hotel Group, and 17th Street Commercial Group), as well as several ASIs (17th and Webster Street Group, 15th and Webster Street Group, 14th and Webster Street Group, and Hotel Menlo Group). This area is also home to a variety of well-established Black-owned businesses centered around the recently-adopted 14th Street BAMBD, the boundaries of which extend along 14th Street from Oak Street, near Lake Merritt, through Lakeside and the Central Core, across West Oakland to Frontage Road along I-880.

Specific Plan Development Objectives for Central Core Area and Potential Historic Resources Conflicts

Opportunity sites in the Central Core are focused on “under-utilized sites.” These represent vacant lots or parcels used for surface parking, as well as smaller-scale commercial buildings that are situated at the periphery of the Central Core, or parcels that sit within ASIs (see Figure V.E-4).

Currently, there are only two opportunity sites identified within the boundaries of the Downtown Oakland Historic District API (see Figure V.E-5); these occur to the east of Broadway and south of 15th Street. These sites do not currently have a height limit, they have a FAR of 20.0, and a density of 90 square feet per unit. Under the Specific Plan the intensity would increase FAR to 30.0 and density to 65 square feet per unit, and the height would remain unchanged. There are several opportunity sites adjacent to the Downtown Oakland Historic District API boundary, including a group of parcels between Broadway and Clay and 11th and 14th streets. These opportunity sites are in areas where there would be no change to height as there is currently no limit and no limit is proposed. The FAR would increase from 20.0 to 30.0, and density would increase from 90 square feet per unit to 65 square feet per unit. There are also several opportunity sites situated north of 14th Street near Webster Street. While a 450-foot limit in this vicinity is an improvement from no limit, there remains potential for this height and scale change to have impacts on resources within the Downtown Oakland Historic District. Density and FAR for this parcel remain unchanged.

The primary building types in the Central Core are larger-scale commercial buildings of a range of heights that include governmental, private office, and residential properties, as well as some smaller-scale commercial resources at the periphery and distributed throughout the entire sub-area. The smaller-scale buildings create breaks in the taller urban wall, provide for light and air to

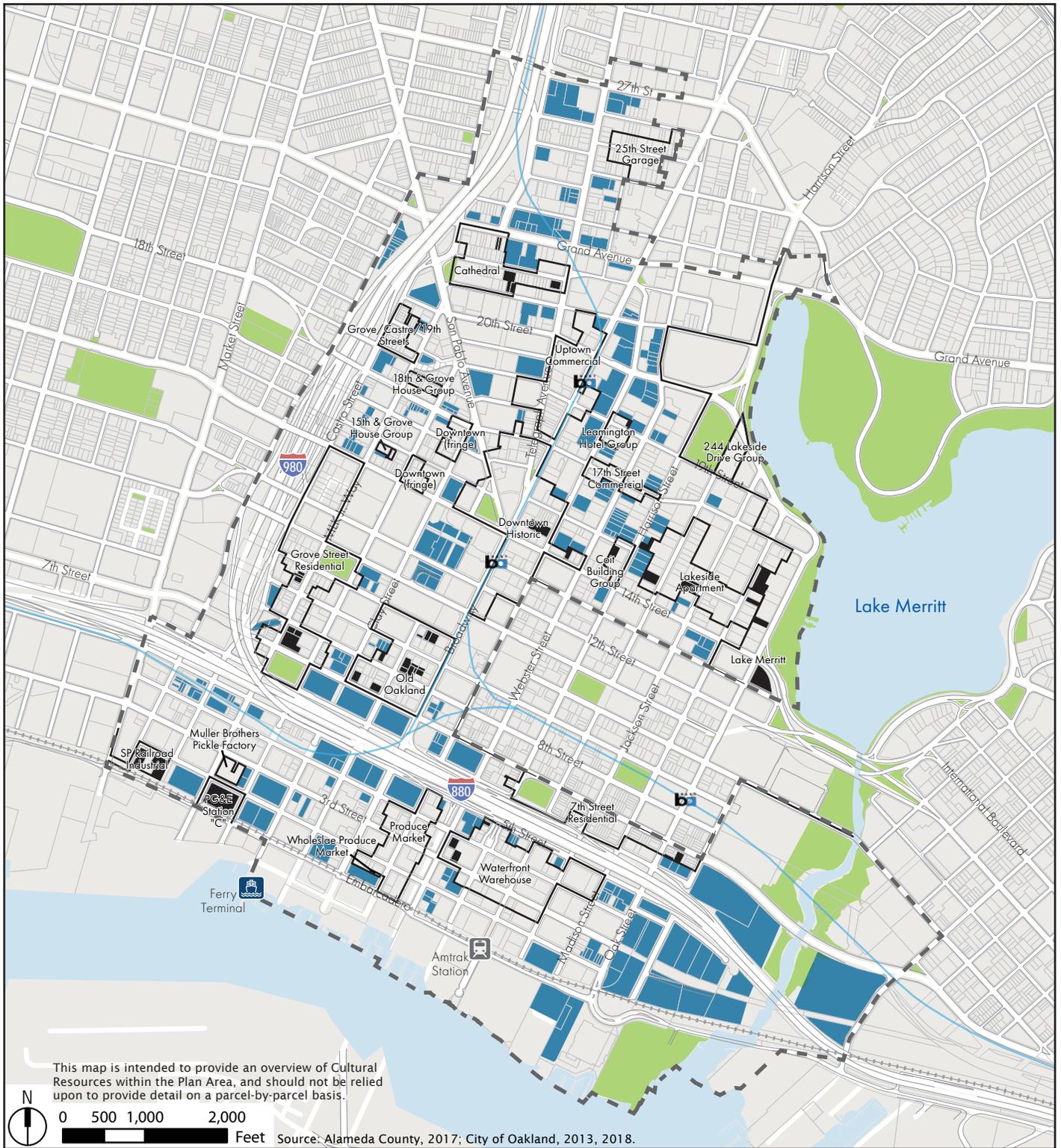


Legend

- Downtown Plan Boundary
- Parks
- BART Station
- Areas of Secondary Importance (ASI)
- BART Line
- Opportunity Sites
- Railroad
- Opportunity Sites within an ASI

Downtown Oakland Specific Plan EIR

Figure V.E-4
ASIs and Opportunity Sites within the Plan Area



Legend

-  Downtown Plan Boundary
-  Parks
-  BART Station
-  Areas of Primary Importance (API)
-  BART Line
-  Opportunity Sites
-  Railroad
-  Opportunity Sites within an API

Downtown Oakland Specific Plan EIR

Figure V.E-5
APIs and Opportunity Sites within the Plan Area

taller buildings, and contribute to an undulating streetscape that helps define the character of downtown. Buildings with smaller footprints and lower heights face increased threat from demolition and redevelopment to accommodate larger-scale buildings with higher-yielding economic values. Such changes are likely to occur over the life of the Specific Plan and could impact historic resources within the Central Core.

Lake Merritt Office District

Existing Conditions

Situated adjacent to Lake Merritt, this employment hub has a significant concentration of large-scale office buildings. The landmark of this sub-area is the mid-century Kaiser Center completed in 1960 by architects Welton Becket & Associates. Fronting Lake Merritt, the building's design was influenced by contemporary buildings along Chicago's Lakeside Drive and the International Style. There is a concentration of mid-century office towers and smaller-scale, mid-century banks in this vicinity that have not been fully evaluated as potential historic resources. These include two towers by Skidmore, Owings & Merrill: the Ordway Building adjacent to the Kaiser Center, completed in 1970, and a building the firm designed for Blue Cross, now also owned by Kaiser, at 1950 Franklin Street between 19th and Thomas L. Berkley Way. The smaller bank buildings are centered around Webster and Franklin streets on or near Thomas L. Berkley Way. The Lake Merritt API extends to include one building parcel at the northwestern point of the lake and includes the Kaiser Center; otherwise, the Lake Merritt Office District does not have any API's or ASI's. Existing height, FAR and density in this region are amongst the highest in the downtown.

Specific Plan Development Objectives for Lake Merritt Office Areas and Potential Historic Resources Conflicts

Opportunity sites in this sub-area are focused around Webster and 20th Street (Thomas L. Berkley Way), as shown on Figure V.E-2. These opportunity sites are wedged between two APIs, as shown on Figure V.E-3. There is also a small collection of mid-century modern branch banks that have not been fully evaluated, and therefore should be treated as potential historic resources for the purposes of determining impacts. The opportunity sites appear to include several parcels that house the small-scale, mid-century bank buildings. It is possible that future development in this sub-area could impact these potential small bank historic resources. These sites are possibly identified for redevelopment because they include portions of an undeveloped parcel used to accommodate surface parking. The height, FAR and density in this region remains unchanged under the Specific Plan, however, given the potential for new development under the Specific Plan in this area more development could impact these resources.

Uptown

Existing Conditions

Uptown radiates out from Telegraph Avenue to the east and the west above 18th Street. It has historically been a shopping, entertainment, and light industrial district and houses two of Oakland's landmark historic theaters, the Fox and the Paramount. There are also many older, small-scale, masonry, commercial buildings within this neighborhood, some of which have been converted to new uses such as art galleries, restaurants, cafes, and housing. Uptown has two APIs, Uptown Commercial and Cathedral (shown on Figure V.E-3), as well as three ASIs: Monumental Power Stations (shown on Figure V.E-5), 520-26 21st Street Group, and 525-33 West Grand Group. The resources typical to this area are small- to medium-scale commercial buildings from the 1920s and 1930s.

Specific Plan Development Objectives for Uptown and Potential Historic Resources Conflicts

In Uptown, the Plan proposes to either decrease, or keep the existing height. FAR would increase along the border of Grand Avenue as well as near 20th Street. Density would increase south of Grand Avenue near 22nd Street as well as between Telegraph Avenue and Broadway from 19th Avenue and Grand Avenue. The Plan illustrates a significant number of opportunity sites in this sub-area that could significantly impact the historic scale of Uptown and may impact resources that are in APIs or are Potential Designated Historic Properties. The Plan proposes to reduce the height limits between San Pablo and Telegraph from 14th street to 19th Street, as well as on the border of Telegraph going north up to Grand Avenue. There are two opportunity sites (which currently have an existing building footprint) located along Grand Avenue immediately adjacent to the Cathedral API and several opportunity sites within this API. Redevelopment and new construction in this API have the potential to impact the overall integrity of the API, thereby resulting in significant and unavoidable impacts. Other development sites in Uptown do not appear to be within either APIs or ASIs.

Koreatown/Northgate (KONO)

Existing Conditions

In the mid-1990s, a de facto Koreatown consisting of businesses along Telegraph Avenue, from about 20th Street to 25th Street, began to take shape. This is a primarily commercial enclave, although there are some residential units on upper stories. Today, Koreatown and Northgate are also home to the 25th Street Art + Garage Cultural District. This cultural district includes older, smaller-scale, primarily one- and two-story, masonry buildings, many of which formerly housed auto-related uses, but have recently been transformed into arts, arts-influenced, maker, and

entertainment spaces. Some auto-related uses remain in this vicinity. This area also includes the 25th Street Garage API, which does not have the exact same boundaries at the cultural district. This area of downtown also has four ASIs (23rd and Northgate, Hutchinson Nursery, Merrell Conant Houses, and Upper Telegraph Avenue).

Specific Plan Development Objectives for KONO and Potential Historic Resources Conflicts as a Result of Plan Implementation

In KONO, the Specific Plan proposes increased heights, FARs and density along 24th, 25th, and 27th streets and along Telegraph Avenue, as shown in *Chapter III, Project Description*, Figure III-9 (depicting proposed FAR changes) and Figure III-10 (depicting proposed density changes) and Figure III-11 (depicting proposed height changes). There are only a few opportunity sites that would be situated within the API or ASI boundaries. However, there is a large opportunity site identified on 27th Street within the Upper Telegraph ASI boundary, as shown on Figure V.E-4. A prominent property type in KONO is the small-scale, masonry, automobile-related building (1900-1960). This property type faces significant development threats because most of these buildings are only one and two stories in height. Redevelopment of these types of resources would add density to this sub-area in addition to the proposed increase to height, FAR and density in KONO. In recent years, there have been significant new development projects in this sub-area.

West of San Pablo

Existing Conditions

This sub-area consists of the wedge of land between San Pablo Avenue, the I-980 freeway corridor, and 14th Street. It consists of pockets of historically significant Victorian-era, wood-frame housing, and several ecclesiastical buildings. The construction of I-980, in the 1970s and 80s separated this area from the rest of the West Oakland's residential areas. There are four separate APIs in this sub-area (Downtown Fringe – two separate areas, 15th and Grove House Group, and Grove/Castro/19th Streets). There are also four ASIs (Minor Hillyard Group, 666 17th Street Group, 19th and San Pablo Commercial, and 20th and San Pablo Commercial). Additionally, there are many individual Local Register properties west of San Pablo. This area of downtown also includes several single room occupancy (SRO) hotels, including the San Pablo Hotel.

Specific Plan Development Objectives for West of San Pablo and Potential Historic Resources Conflicts

This sub-area includes small-scale, wood-frame residential remnants of the Victorian era. This includes both single-family and smaller-scale apartment or flat buildings. The lot sizes in this area

also reflect the historic grid and parcel configuration. Lot assembly in this location could increase the bulk and scale of the area, thereby changing the historic character. There are several clusters of opportunity sites between Castro Street, Martin Luther King, Jr. Way (historically Grove Street), and 14th and 16th streets. Proposed new development here could result in larger-scale projects on assembled parcels, as increased height, FAR and density are proposed for some areas. It is possible that this type of development could alter the scale and rhythm of historic development and result in the loss of individual Local Register buildings through increased development pressure.

Lakeside

Existing Conditions

This sub-area, situated to the south and west of Lake Merritt, has always had a residential focus. At the turn of the twentieth century, large lots with single-family houses dominated the built environment in this area. By the 1910s and 20s, these large lots were merged to accommodate higher-density uses and larger apartment buildings. Later in the 1950s and 60s several courtyard-style, mid-century apartment buildings further altered neighborhood. Today, apartment buildings, including Period Revival 1920s and 30s and mid-century modern examples, are the prevailing building type in Lakeside. However, several historic single-family residences remain in the area. There are two APIs in Lakeside that reflect the apartment theme in this area: 244 Lakeside Drive Group and Lakeside Apartment. Lakeside also has a strong institutional presence with the Scottish Rite Temple, Camron Stanford House, and the Islamic Center. This area is also home to a variety of well-established Black-owned businesses centered around the recently adopted 14th Street BAMBBD, the boundaries of which extend along 14th Street from Oak Street, near Lake Merritt, through Lakeside and the Central Core, to Frontage Road along I-880.

Specific Plan Development Objectives for Lakeside and Potential Historic Resources Conflicts

Pre- and Post-War, medium-sized apartment buildings of two to four stories abound in this sub-area of the Plan. Height limits in a portion of this area are proposed to increase from the current 45 and 55 feet to between 65 and 85 feet, shown on Figure III-11. There are a range of FARs in the Lakeside region from 20 to 2.5. Closest to the lake FARs, would increase from the existing 2.5 and 4.5 to between 12 and 7.5 as shown on Figure III-9. Densities closest to the lake are between 300 and 450 square feet per unit, and would increase to between 250 to 110 square feet per unit as shown in Figure III-10. These changes would not substantially impact the historic scale in this sub-area of downtown. However, it would potentially encourage redevelopment of lots for larger, taller buildings to accommodate more housing. This could result in the loss of some historic buildings to demolition as new development occurs in this area of downtown.

Old Oakland

Existing Conditions

Old Oakland includes the Victorian-era commercial center of 1870s Oakland, which runs along Broadway and Clay Street from 7th to 10th streets. Consisting of two- to three-story masonry buildings along a historic grid of streets, these buildings form a cohesive, Victorian-era streetscape. The Grove Street Residential API and Preservation Park are within this planning sub-area, as shown on Figure V.E-5. The blocks at the southern edge of this sub-area along the I-880 corridor, though not within the API, contain a collection of large-scale civic buildings including the Oakland Police Department and Jail, the Wiley M. Manuel Courthouse, the Glenn Dyer Detention Facility, and a large parking lot. These two large-scale clusters of more modern buildings hem in the Old Oakland Historic District; I-880 further separates Old Oakland from the historic Oakland waterfront. There are three ASIs in this sub-area: Clay-Jefferson 10th 11th; 581-89 8th Street; and 7th and Franklin Group, as shown on Figure V.E-4.

Specific Plan Development Objectives for Old Oakland and Potential Historic Resources Conflicts

An opportunity site is identified on 9th Street between Washington and Clay and across from Swan's Market; this is the heart of Old Oakland S-7, a designated historic district. There is surface parking on this block between two, low-scale, masonry commercial buildings, both of which are contributors to the district; this appears to be the opportunity site, as shown on Figure V.E-1. As noted above, this sub-area also includes a series of opportunity sites including the collection of civic buildings between 6th and 7th streets, which have not been fully evaluated within the context of mid-century design in Oakland. These large-scale parcels are identified as opportunity sites in the Plan. The close proximity of these large opportunity sites to the southern edge of Old Oakland (across from the freeway) requires careful consideration as these sites are further explored for future development. Heights and densities in Old Oakland would remain unchanged, except for a portion near the I-980 along 14th Street and south of 12th Street between Castro Street and Martin Luther King Jr. Way, and a portion south of 8th Street between Clay and Broadway. There are minor FAR increases proposed along the border of I-980 from 14th Street to the I-880. While larger-scale buildings at this edge of Old Oakland may not in and of themselves result in impacts to historic resources, Old Oakland is one of downtown's most significant collections of historic buildings and future development in and around the designated historic district and requires careful consideration.

Chinatown

Existing Conditions

As noted in the Historical Setting section (2.d) above, the Chinese community has a long history in Downtown Oakland. A small Chinese neighborhood developed at the corner of 7th and Webster streets in the early 1870s, expanding to a multi-block area radiating from around this location and over to Madison Square by the time of the 1906 earthquake. Chinatown remains an active residential and commercial neighborhood. This area of downtown includes a large number of small-scale, early 20th-century commercial buildings, some with residential uses at the upper story.

Specific Plan Development Objectives for Old Oakland and Potential Historic Resources Conflicts

This sub-area of downtown was covered in the Lake Merritt Station Area Plan (LMSAP) EIR. As described in the LMSAP EIR, existing SCAs and regulations protecting historical resources, and proposed Plan policies outlined in the LMSAP EIR would mitigate any potential impact of overall redevelopment in the LMASP Planning Area, but would not be able to reduce the potential impact of demolition of Oakland Unified School District or County property to a level that is less than significant. If demolition or substantial alteration of historically-significant resources is identified by the City as the only feasible option for development in the LMASP Planning Area, the impact of development under the LMSAP would be considered significant and unavoidable. This finding should be viewed as conservative, as it is not certain that historic resources on opportunity sites would be demolished or otherwise impacted.

Jack London District

Existing Conditions

The Jack London District is located on Oakland's waterfront, south of the I-880 Freeway, fronting the Oakland Estuary. The sub-area was separated from the rest of Downtown Oakland with the construction of the I-880 Freeway beginning in the late 1940s and further expanding in the 1960s, and by railways prior to the I-880 Freeway. The Jack London District is a mix of older low-scale, masonry commercial buildings and warehouses, Port-related buildings, a public plaza and estuary walkway, Jack London Square (a 1950s tourist-focused development continuously expanded and remodeled into the 2000's), and new multi-story housing that has replaced vacant lots and low-scale older commercial and industrial buildings in recent years. Although much of the Jack London District has an industrial past, many of its older or historic buildings that once housed industrial uses have become outdated for today's manufacturing and distribution operations, and

are instead often targeted for office conversion, arts uses, or leased to small-scale industrial users with unique needs.

The National Register-listed Waterfront Warehouse Historic District and the Wholesale Produce Market API are both located within this sub-area of downtown. Additional APIs include the PG&E Substation C, Muller Brothers Pickle Factory, and SP Railroad Industrial. Further, there are five ASIs in the Jack London district: Brett Harte Boardwalk; West Waterfront; Lower Broadway; 4th and Webster (one parcel); and 2nd, 4th, Jackson Warehouse.

Specific Plan Development Objectives for the Jack London District and Potential Historic Resources Conflicts as a Result of Plan Implementation

There are four APIs and five ASIs within the Jack London District. Extensive new development and numerous opportunity sites are proposed for this area. In addition, there is an opportunity site identified at 2nd and Jefferson streets – this is the Union Iron Works at 580 2nd Street. This is both a Designated Oakland Landmark and on the NRHP, but only takes up a portion of this block. In addition, a vision idea is put forward to develop a Webster Street Green above the Posey Tube between Embarcadero West and extending under the I-880 to 7th Street. This is a follow-on recommendation from the Lake Merritt Station Area Plan and the Estuary Policy Plan. The Webster Street Green would be situated between two APIs with historic distinction and an industrial character. Large-scale residential opportunity sites and increased density is proposed along I-880 west of Webster Street and along Embarcadero West, west of Broadway. This would change the scale and character of this part of the waterfront. Combined with extensive development that has already occurred in and around both the Waterfront Warehouse District and the Produce Market District, these districts are at risk of changing their overall historic integrity, thereby losing status as an historic district. The Plan plans to protect the Produce Market District by keeping the character of the area as Flex Industry. However, as part of the Howard Terminal Option, the area between Brush, Clay, 2nd, and 4th streets could become Mixed Use Flex, meaning the form and character of the proposed Jack London Maker District (along 3rd Street) would not be preserved in this option. Large-scale residential opportunity sites are identified east of Madison Street and south of I-880 to the Plan Area boundary. This is just east of the Waterfront Warehouse Historic District. Of the sub-areas in the Plan Area, the Jack London District appears to be subject to the most potential conflict and impairment or loss of designated historic resources due to the amount of proposed intensity increases (including FAR, and densities), as well as the number opportunities sites identified for this area.

Laney College*Existing Conditions*

Laney College is one of the four colleges of the Peralta Community College District and is located near the Lake Merritt BART Station. The Lake Merritt Channel separates the Laney College Main Campus, located on Fallon Street, from the Athletics Campus. The campus was developed from a 1966 Master Plan by Skidmore Owings & Merrill and completed in 1971. A full historic resources analysis has not been undertaken for the campus.

Specific Plan Development Objectives for Laney College and Potential Historic Resources Conflicts as a Result of Plan Implementation

The Laney College sub-area has two large opportunity sites to the south of 7th Street. This sub-area warrants further study within the historic context of educational institutions in Oakland and within the body of campus work to fully understand how the future vision of Laney College may impact historic resources.

Lake Merritt and Estuary*Existing Conditions*

As part of the Lake Merritt Station Area Plan, changes in the area around the Lake Merritt BART Station were anticipated, along with transit-oriented development. The Oakland Auditorium is located to the east of the Plan Area and adjacent to Lake Merritt. It is a 1915 Beaux-Arts building to the south edge of Lake Merritt and is a visually prominent building along the lake. Plans are underway to renovate and upgrade this building. The Lake Merritt Channel connects the Oakland Estuary to Lake Merritt, with significant park and green spaces on either side of the Channel.

Specific Plan Development Objectives for Lake Merritt and Estuary and Potential Historic Resources Conflicts as a Result of Plan Implementation

Development objectives and potential historic resources conflicts and impacts in this sub-area of downtown are covered in the Lake Merritt Station Area Plan EIR.

c. Analysis and Findings**(1) Historic Resources Impacts (Criterion 1)**

Impact CULT-1: Implementation of the Specific Plan and its associated development is anticipated to result in the demolition, destruction, or relocation of some historical resources either as individual resources and/or as contributors to historic districts. (SU)

While the Specific Plan puts forward many policies that would be beneficial to historic and cultural resources in the area, other policies that may be beneficial in other Plan realms, such as economic opportunities or housing and affordability, would potentially impact historic and cultural resources, as they encourage new construction in areas that likely include historical resources within the downtown built environment.

The Plan encourages development opportunities and increases in intensity that would put pressure on lower-scaled historic resources throughout downtown and may significantly impact previously and not yet identified individual historic resources including historic districts, APIs and ASIs. The Plan also supports the preservation of cultural and historical resources, limiting or potentially avoiding impacts through preservation-specific policies in the Plan. Historic preservation is also encouraged via other city policies including the General Plan Historic Preservation Element, existing development standards and SCAs. However, some individual projects that occur under the Specific Plan could involve the demolition or alteration of historically significant resources. Some of these resources are known resources and others may become significant resources over the plan buildout.

If demolition, destruction, or relocation of historically-significant resources is determined by the City as necessary to achieve competing outcomes of the Plan, than such an impact would constitute a significant and unavoidable impact to historic resources. Together with the goals, objectives, policies, actions, and outcomes contained in the Plan, the HPE, and the City's SCAs, implementation of the following mitigation measures would lessen, but not to a less-than-significant level, potential project and cumulative impacts of the Specific Plan and associated development projects on cultural and historical resources.

Mitigation Measure CULT-1: The following mitigation measures shall be implemented to the extent feasible to minimize impacts to historic resources in the Plan Area and its vicinity. The mitigation measures are identified in order of priority. As many of the measures as feasible shall be implemented:

Mitigation Measure CULT-1A: The Plan shall be revised to include the following implementation measures focused on minimizing impacts to historic resources:

- i. **Reinstate and promote the City Downtown Façade Improvement Program⁵²** consistent with Action 3.8.1(g) of the Historic Preservation Element of the City of Oakland General Plan for both commercial and residential properties including SROs. The program shall require financial contribution to this fund when historical resources are

⁵² The fund stagnated as funding available through tax increment financing was eliminated with the Redevelopment Agencies in 2012.

impacted by future development projects in the Plan Area, and potentially the other Specific Plan areas, based on a formula established by the City as part of reinstating the program. If reestablished, the fund shall be used to implement the additional mitigation measures identified below, as appropriate.

- ii. **Revise the City Transfer of Development Rights (TDRs) Ordinance**, within three years of Plan adoption, to encourage the retention of the smaller-scale buildings that are prevalent in downtown and are at high risk for redevelopment and demolition. The revised ordinance should be accompanied by a specific TDR program for building owners and project sponsors within the Plan area, and potentially the other Specific Plan areas. This program should include identifying potential properties to participate and outreach to these owners so they understand the benefits as well as how this program could fit into a menu of preservation incentives. The transfer enables the owner of the receiving site to develop additional gross floor area, above and beyond what would otherwise be allowed. The use of this program shall be considered into the current height changes proposed downtown. A good model for this program has been on-going in San Francisco.
- iii. **Adopt an Adaptive Reuse Ordinance**, within three years of Plan adoption, that would encourage preservation of historic buildings within the Plan Area and potentially the other Specific Plan areas. The City of Los Angeles has a highly successful, similar program adopted in 1999 for downtown that was extended into other areas in 2003 that can serve as a model. Other elements of the ordinance should include a means to expedite project approvals for historic building rehabilitations that would convert vacant or underutilized properties to provide housing, SRO units, live-work units, or cultural activities. It should also delineate which historic buildings in downtown are eligible, with a focus on designated Landmarks, buildings within National Register-listed historic districts, and buildings within APIs and ASIs. Provisions could include but not be limited to reduced permitting costs, ways to accommodate existing floor area ratios, and reduced parking and open space requirements, when necessary to achieve project goals. Other provisions could include expedited review of the use of the California Historical Building Code (CHBC) and ways to encourage projects to meet the Secretary of the Interior's Standards for the Treatment of Historic Properties.
- iv. **Formulate an oral history program for the cultural groups that have played an important role in downtown.** Numerous cultural groups and cultural traditions have influenced the development of downtown and its communities. Engage in a public outreach program to formulate a list of groups and stakeholders, key community individuals who can take leadership roles, and develop a program that will inform the oral history project. Partnerships with the Oakland Public Library, Laney College and

StoryCorps could bolster this program. The City should strive to be an instigator in this program.

Mitigation Measure CULT-1B: Expand public outreach and implementation of the California Historical Building Code (CHBC) for projects that qualify under State law. Dovetail use of the CHBC with the Adaptive Reuse Ordinance as it is implemented. Provide professional development training to the City's building officials and inspectors on the use of the CHBC so that they can implement project review for qualified buildings within reasonable timeframes. Appoint a Senior Building Official as the CHBC-liaison between the Planning Department, the Chief Fire Official and the Building Department so that projects are reviewed with consistency and clarity. Encourage City staff to schedule a seminar with the Office of Historic Preservation's member of the State Historical Safety Board to provide a thorough background of how the code is implemented.

Mitigation Measure CULT-1C: Further the Planning Code protections for SROs hotels with additional façade protections for these buildings, perhaps by deeming this specific historic building type eligible for participation in the Mills Act program or by documenting these resources as a thematic, rather than geographically-based API. While Planning Code Chapter 17.153 Demolition, Conversion and Rehabilitation Regulations for Residential Hotels, was adopted in 2018, and provides some protections, additional incentives or protections would further ensure the viability of these resources and mitigate further losses of both their historic use and character.

Mitigation Measure CULT-1D: As part of the implementation of Plan Policy LU-2-4 that revises the City's Demolition Findings Requirements to facilitate new compatible development near the outer edges of fragmented APIs and ASIs, require tailored design guidelines to help ensure architectural compatibility. The guidelines should illustrate treatments for rehabilitation of the historic commercial buildings typical in these historic districts, as well as provide strategies for new construction both within and on the immediate periphery or edge of these significant areas. New construction in these areas should take into consideration the historic parcel pattern; assembling lots and creating bulkier building footprints changes the character of the street rhythm. These guidelines will help mitigate the impacts of future development on these sensitive areas of downtown. A strong example for this mitigation is the Historic Downtown Los Angeles Design Guidelines completed in July 2002 by the Los Angeles Conservancy and three downtown Business Improvement Districts (BIDs).⁵³

⁵³ Historic Downtown Los Angeles Design Guidelines, Architectural Resources Group, <http://www.urbandesignla.com/resources/docs/historicdtla/lo/historicdtla.pdf>, accessed August 14, 2019.

Mitigation Measure CULT-1E: The City shall also consider incorporating the following additional mitigation measures as implementation policies or guidelines in the Plan prior to its adoption, although these have a lower priority than Mitigation Measures CULT-1A – CULT-1D.

- i. **Study the feasibility of raising the Mills Act tax loss limits** for properties within the Specific Plan, Lake Merritt Station Area Plan and Broadway Valdez Specific Plan boundaries, which would encourage more participation in the program. Currently, Oakland has six Mills Act properties within the Plan Area.
- ii. **Provide City support of efforts at the State level to create a State Historic Tax Credit.** This could take the form of pro-active encouragement of state legislation that would enact the tax credit.
- iii. **Update the Oakland Cultural Heritage Survey** and as part of that effort include elements that focus on: (1) Downtown’s built environment associated with the Modern Movement or the Recent Past to determine methods to more completely understand the types of resources present and their historic significance. This could take the form of a funded Historic Context Statement for Modern Buildings and Landscapes in downtown or a site-specific survey of resources built between 1940 and 1975; and/or a focused review of the banking cluster near the Lake Merritt office district, venues related to food and entertainment, mid-century courtyard apartments, as well as older commercial buildings in downtown that may have been remodeled to reflect the Modern aesthetic. In recent years, Sacramento, San Francisco, Fresno and Pasadena have invested in this type of preservation planning tool with great success and community interest. Downtown’s streetscape includes historic parks that are used to determine methods to more completely understand the types of resources present along the streetscape and in downtown’s parks. This could take the form of a funded Cultural Landscape Inventory to document and categorize resources. Good models for this are the City of San Francisco Civic Center Cultural Landscape Inventory and the Market Street Cultural Landscape Inventory.
- iv. **As part of any redevelopment or expansion of the Laney College Campus,** require that a full historic resources evaluation be conducted as well as any properties slated for redevelopment around the College to fully understand the potential historic resources associated with this educational institution and to understand the significance of the campus within the body of work of Skidmore, Owings & Merrill.
- v. **Prepare and implement an interpretive program of signage within the Webster Green in Jack London Square** to inform users of this new greenway of the historic industrial

character of the surrounding urban fabric. This could be an extension of the signage already present in the Waterfront Warehouse District.

Mitigation Measure CULT-1F: Independent of the Specific Plan, the City shall consider the following measures:

- i. **Promote graffiti abatement** by including additional abatement trips. Currently, only one “courtesy” abatement trip can be scheduled for private property, due to City staffing issues. Extend this to additional abatement trips, per year, within the Specific Plan area boundary. Further, prioritize graffiti abatement in the Specific Plan Area within the Public Realm, especially on prominent historic buildings. Additionally, understand that sometimes graffiti can acquire a cultural significance as well and encourage a graffiti arts program with partner building owners to engage local artists and deter graffiti. Also, raise awareness of non-destructive graffiti abatement methods so historic materials like brick and terra cotta aren’t destroyed.
- ii. **Improve vacant building security** through partnerships with the Planning, Building and Police Departments to collaborate on maintaining a list of vacant buildings so that Police Officers know which buildings might be at risk of vandalism or other illegal activity. This would mean an investment in a vacant building inventory in the Specific Plan area.
- iii. **Maintain a list of vacant parcels to assist with building relocation assistance.** Additionally, a relocation fund could be established and paid into by projects that demolish historic resources. This could result in the salvage of stand-alone historic resources, especially smaller resources that sit on large lots, which face fierce development pressure. This is more appropriate in areas that are not considered historic districts or groupings of buildings. This can be facilitated via CEQA review by making known Historic Preservation Element Action 3.8.1.2, allowing buildings to be moved to a location consistent with its historic or architectural character.
- iv. **Study the feasibility of amending the Downtown Oakland National Register Historic District** to provide a means for more property owners to use the Federal Rehabilitation Tax Credits. The amendment should evaluate an extended boundary and additional contributors, to include more of downtown’s significant historic buildings. This would provide a means for more property owners to use the Federal Rehabilitation Tax Credit as owners of resources within a National Register-listed historic district.

Implementation of Mitigation Measures CULT- 1A – CULT-1F would lessen this impact but it would remain significant and unavoidable. **(SU)**

Impact CULT-2: Alterations to Historic Buildings that could occur under the Specific Plan could change the significance and character of historic resources as a result of the Specific Plan. (SU)

As development occurs under the Specific Plan it is likely that alterations to existing historic resources would be proposed. Such modifications would potentially result in alterations that could change the significance and character of historic resources. However, existing city policies that relate to known historic resources may result in lessening these potential impacts, including adherence to the Secretary of the Interior's Standards for the Treatment of Historic Properties or established design review practices of the Zoning Division, Landmarks Preservation Advisory Board, and Planning Commission for compatibility of alterations to historic resources. It is possible that alterations to historic resources would result in a less-than-significant impact to historic resources but conservatively this is identified as a significant and unavoidable impact recognizing that not all modifications will be feasible to mitigate to a less-than-significant level.

Mitigation Measure CULT-2: Implement Mitigation Measures CULT-1A – CULT-1F. (SU)

Implementation of Oakland Municipal Code 17.136.075, Regulations for Demolition or Removal of Designated Historic Properties and Potentially Designated Historic Properties, as well as the proposed beneficial Plan policies outlined above, would provide some level of protection for historical resources that may be affected by implementation of the Specific Plan. However, additional mitigation would be necessary to further reduce potential impacts on historical resources located on the opportunity sites shown on Figure V.E-1.

Although the proposed measures would not mitigate impacts to historical and cultural resources to a less-than-significant level, the City has a responsibility to mitigate to the greatest degree feasible (CG Section 15091) and these mitigation measures could be used to offset the findings of overriding consideration (CG 15093) to compensate for the unavoidable impacts with a more defined strategy and set of implementation actions. In this way, the Specific Plan implementation actions may also assist in balancing competing goals and objectives as new projects are considered.

(2) Archaeological Resources (Criterion 2)

The project would have a significant impact on the environment if it would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines 15064.5. A total of 24 historic and prehistoric archaeological sites and isolates were found to be present within the Plan Area and surrounding ¼-mile radius. Therefore, there may be potential for construction activities from new development under the Plan to impact archaeological resources in the Planning area.

Any of these resources identified within the Specific Plan area that could potentially be impacted by development under the Plan should be revisited and evaluated/reevaluated. All resources that were evaluated more than 10 years ago shall be revisited and reevaluated, any resources that were not previously evaluated should be revisited and evaluated.

The appropriate DPR 523 forms (including the primary form, building, structure, object (BSO) form, sketch map, project location map, and continuation form as needed) should be completed for any resource that may be impacted by project level activities. Recommendations on the eligibility of the resource should also be provided and noted on the DPR forms. As required, these forms shall then be submitted to the Northwest Information Center (NWIC).

Resources determined to be ineligible for listing in the CRHR shall not require any additional resource management. For resources that are determined to be eligible for listing in the CRHR, impacts/adverse effects must be avoided, or such impacts must be mitigated. Mitigation of impacts to significant archaeological resources can include, but are not limited to, data recovery excavations, archaeological monitoring, detailed analytical studies, and archival research. All treatment and evaluation of resources should be conducted in consultation with the Lead Agency.

Potential impacts to archaeological resources have been addressed in the Oakland General Plan, the Land Use and Transportation Element (LUTE) EIR, as well as the City's SCAs. Compliance with 1) General Plan objectives and policies addressing archaeological resources; 2) the LUTE EIR mitigation measure that specifically direct the City to establish procedures for determining when discretionary city approval of ground-disturbing activities warrant special conditions to safeguard archaeological resources; which has, in part, been incorporated into (3) the City's SCA's addressing archaeological resources, would reduce impacts on archaeological impacts to less-than-significant in most cases.

In addition, various state regulations provide guidance on the steps that must be taken if significant archaeological resources are uncovered during ground-disturbing activities associated with construction. In accordance with CEQA Guideline Section 15064.5 (f), should any previously unknown historic-period resources, including but not limited to glass, metal, ceramics, wood, privies, trash deposits or similar debris, be discovered in any of the Plan Area s during grading, trenching, or other on-site excavation(s), earthwork within 25 feet of these materials shall be stopped until a qualified professional archaeologist has an opportunity to evaluate the potential significance of the find and suggest appropriate mitigation(s), as determined necessary to protect the resource. Pursuant to CEQA Guidelines 15064.5 (f), if potentially significant cultural resources are discovered, work shall halt in the area until a qualified archaeologist can assess the significance and find, and if necessary, develop appropriate treatment measures in consultation with the City of Oakland and other appropriate agencies and interested parties. If the

archaeologist determines that the find does not meet the CEQA standards of significance, construction may proceed. On the other hand, if the archaeologist determines that further information is needed to evaluate significance, City staff shall be notified and a data recovery plan shall be prepared.

Implementation of the City of Oakland's SCA-CULT-1: Archaeological and Paleontological Resources- Discovery During Construction (#33), and SCA-CULT-2: Archaeologically Sensitive Areas-Pre-Construction Measures (#34), is considered adequate to ensure that subsurface archaeological materials are dealt with according to regulatory guidance and would minimize the potential risk of impact to archaeological resources to a less-than-significant level. Through the City's project-level review of individual development project proposals, and prior to issuance of a demolition, grading, or building permit, the project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision B (Construction ALERT sheet) of the City of Oakland's SCA CULT-2. Implementation of SCA-CULT-1 and SCA-CULT-2 ensures impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to archaeological resources.

(3) Paleontological Resources (Criterion 3)

The project would have a significant effect on the environment if it directly or indirectly destroys a unique paleontological resource or site or unique geological features. Deep excavations for building foundations associated with adoption of and development under the Specific Plan may disturb these geologic units of low to moderate paleontological sensitivity.

It is possible that fossils would be discovered during excavation within the Plan Area. Because the significance of such fossils would be unknown, such an event represents a potentially significant impact to paleontological resources. If paleontological resources are encountered during construction, potential impacts would be reduced through documentation, evaluation, and assessment of the significance of the findings under CEQA Guidelines Section 15064.5 by a qualified paleontologist. If the finding is determined to be significant and avoidance is not feasible, the qualified paleontologist would prepare and implement an excavation plan for the resource. Resources that would otherwise be destroyed or lost would be recorded and their scientific value assessed by a qualified paleontologist. The implementation of SCA-CULT-1: Archaeological and Paleontological Resources-Discovery During Construction (#33) would be incorporated with adoption of and development under the Specific Plan. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to paleontological resources.

(4) Human Remains (Criterion 4)

The project would have a significant impact on the environment if it results in the disturbance of human remains, including those interred outside of formal cemeteries. Ground disturbing activities associated with construction activities in the Specific Plan Area could disturb previously unknown human remains, including those interred outside of formal cemeteries. The potential to uncover Native American human remains exists in locations throughout California. Although not anticipated, human remains may be identified during site-preparation and grading activities.

Potential impacts would be reduced through training of on-site construction personnel in the appropriate procedures to be enacted if human remains are encountered (SCA-CULT-2: Archaeologically Sensitive Areas-Pre-Construction Measures (#34)), including work stoppage and agency notification. Implementation of SCA-CULT-3: Human Remains-Discovery During Construction (#35), would further reduce any potential impacts to a less-than-significant level through the notification of the Alameda County coroner if remains are encountered. If the coroner determines remains to be Native American, the NACH would be informed within 24 hours of discovery. In addition, Section 7050.5(b) of the California Health and Safety code would be implemented in the event that human remains, or possible human remains, are located during project-related construction excavation.

Implementation of SCA-CULT-2: Archaeologically Sensitive Areas Pre-Construction Measures (#34), and SCA-CULT-3: Human Remains-Discovery During Construction (#35) would reduce any impacts to a less-than-significant level. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to human remains.

d. Cumulative Cultural and Historical Resources Impacts

Cumulative Impact CULT-1: Implementation of the Specific Plan and its associated development, combined with cumulative development in the Plan Area and citywide, including past, present, existing, approved, pending, and reasonably foreseeable future development would contribute to a significant and unavoidable adverse cumulative impact to cultural and historical resources. (SU)

Adoption of and development under the Specific Plan, when combined with the cumulative development citywide, could result in cumulative impacts to cultural resources. Past projects in this area are included in the existing setting. Present projects would include any projects currently under construction within the geographic area, Plan Area and its surroundings. Reasonably foreseeable future projects are described in *Section V.A, Land Use and Planning*.

Adoption of and development under the Specific Plan could result in significant impacts to cultural resources. Excavation activities, particularly deep excavation activities, associated with buildout of the Plan Area and surrounding cumulative projects could damage or destroy unique paleontological resources, and thereby result in a potentially significant cumulative impact. Such impacts could combine with significant impacts of the project referenced above to form a significant cumulative impact to cultural resources. However, given the applicability of SCA-CULT-1: Archaeological and Paleontological Resources-Discovery During Construction (#33), SCA-CULT-2: Archaeologically Sensitive Areas-Pre-Construction Measures (#34), SCA-CULT-3: Human Remains-Discovery During Construction (#35), and SCA-CULT-4: Property Relocation (#36) identified above to reduce potential impacts, and the mitigation measures identified in the environmental documents for all cumulative projects in the geographic context in Oakland, potentially significant cumulative impacts to cultural resources would, under most circumstances, be reduced to a less-than-significant level. In addition, reasonably foreseeable future projects would be subject to development guidance contained within the Historic Preservation Element of the General Plan and other applicable historic preservation zoning controls and landmark ordinances to ensure protection of cultural resources.

There is a possibility that if demolition or major alternation of a historic resource occurs with adoption of and development under the Specific Plan, and avoidance adaptive reuse, and appropriate relocation as identified in SCA-CULT-4: Property Relocation (#36) are not feasible, and the same circumstance occurs with other projects in the Plan Area vicinity that may likely affect potential historic resources, a significant and unavoidable cumulative impact could result, even with the application of recordation, public interpretation, and financial contributions as identified in all SCAs incorporated to all development projects.

Mitigation Measure Cumulative CULT-1: Implement Mitigation Measures CULT-1A – CULT-1F. (SU)

Based on the information in this section and for the reasons summarized above, adoption of and development under the Specific Plan could contribute to the cumulative cultural resources impact even with Mitigation Measure CULT-1A-CULT-1F. This impact could be considered significant and unavoidable related to cultural and historical resources.

F. AESTHETICS

This section describes the current aesthetic resources in the Plan Area and its vicinity and analyzes how implementation of the Downtown Oakland Specific Plan and its associated development may affect these conditions. Specific Plan, existing City policies, and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified.

Under CEQA Section 21099(d), "Aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment."¹ Accordingly, aesthetics is no longer considered in determining if a project has the potential to result in significant environmental effects for projects that meet all three of the following criteria:

1. The project is in a transit priority area.²
2. The project is on an infill site.³
3. The project is residential, mixed-use residential, or an employment center.⁴

The Specific Plan Area meets all three of the above criteria because it is (1) the Plan Area has two BART stations within its boundaries, the 19th Street BART Station and the 12th Street BART Station and the Lake Merritt BART station is adjacent to the Plan Area; (2) The entire Plan Area is within an urban area of Oakland that includes commercial, office, and residential uses; and (3) the development program for the Specific Plan includes both residential, commercial, light industrial, and institutional square footage. Thus, this section does not consider aesthetics in determining the significance of potential impacts under CEQA. Nevertheless, the City of Oakland (City) recognizes that the public and decision makers may be interested in information about the aesthetic effects of a proposed project; therefore, the information contained in this section related to aesthetics is provided solely for informational purposes and is not used to determine the significance of environmental impacts pursuant to CEQA.

¹ CEQA Section 21099(d)(1).

² CEQA Section 21099(a)(7) defines a "transit priority area" as an area within ½ mile of an existing or planned major transit stop. A "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 AM and PM peak commute periods.

³ CEQA Section 21099(a)(4) defines an "infill site" as either (1) a lot within an urban area that was previously developed; or (2) a vacant site where at least 75 percent of the site perimeter adjoins (or is separated by only an improved public right-of-way from) parcels that are developed with qualified urban uses.

⁴ CEQA Section 21099(a)(1) defines an "employment center" as a project situated on property zoned for commercial uses with a FAR of no less than 0.75 and located within a transit priority area.

1. Setting

This section describes the existing conditions with the Plan Area and its vicinity related to visual character, views, scenic highways and routes, and scenic vistas. Shade, shadow, and wind are also described.

a. Existing Visual Character

The visual character of the Plan Area comprises the visual characteristics of its natural and built elements, including the street grid; buildings (individually and collectively); trees, parks and public open spaces; bodies of water; and major transportation infrastructure. The roughly 930-acre Plan Area occupies the northwest central portion of the City and adjoins the Broadway Valdez District and to the north, the Lake Merritt Specific Area Plan to the east, the West Oakland Specific Plan to the west and Alameda and the estuary to the south. The following describes the visual character of the 930-acre Plan Area and the adjacent areas including Chinatown,⁵ and Lake Merritt and the Estuary, as well as Howard Terminal.

(1) Plan Area

The Plan Area is a densely built urban environment with a variety of building types. The street grid is primarily orthogonal, with the exception of the area within the City Center where diagonal Telegraph Avenue and San Pablo Avenue interrupt the grid pattern. Many of the footprints throughout downtown have smaller building footprints are a result of the lot scale, which is consistent with the original platting (land divisions) established in downtown. Portions of the Plan Area are characterized by low-rise buildings on small lots and few green spaces, primarily along the Interstate (I-) 980 and I-880 freeways. Some blocks consist of newer mid-rise buildings and high-rise buildings on larger lots.

The sunken I-980 freeway creates a visual void and physical barrier in the built environment directly to the west of the Plan Area, separating the general downtown area from West Oakland. Similarly, the elevated I-880 freeway is a visual barrier between the downtown area and the waterfront area surrounding Jack London Square. The visual character of each of the Plan Area's sub-areas is further discussed below.

⁵ The majority of Chinatown is outside of the Downtown Specific Plan Area as it falls within the Lake Merritt Specific Plan which was adopted in December 2014 (See Figure III-2 in *Chapter III, Project Description*). This in no way means that the impacts of the Downtown Specific and its associated development on Chinatown (as well as other adjacent areas) are not considered and fully analyzed for each of the topic areas.

Central Core

Near the center of the Plan Area, the Central Core area consists of an eclectic mix of low-, mid-, and high-rise buildings, as shown in photo 1. Being located near the 12th Street Oakland and 19th Street Oakland BART Stations, the Central Core area is a hub for much of the office, commercial, and civic-related activity in Oakland, and contains a dense transit corridor. The intensity and size of structures generally decreases with distance from the BART stations. Notable structures and landmarks include Frank H. Ogawa Plaza (see photo 3) and the Tribune Tower (see photo 4). Defining features include government offices; historic buildings; small, well-loved and unique retail businesses on Broadway; and a variety of well-established, Black-owned businesses, such as Suya (see photo 2) on 22nd and Broadway, centered around the recently-adopted 14th Street “Black Arts Movement and Business District.” The Central Core area is also home to many of Oakland’s single-room occupancy residential hotels. A diverse range of historic, older, and modern structures provides a pleasant dissimilarity in building massing and design, displaying Oakland’s past and showcasing its future. However, the Central Core area also lacks open space besides Frank H. Ogawa Plaza, and contains scattered surface parking lots and unoccupied buildings in disrepair.



Photo 1- Central Core area



Photo 2- Suya: African- Caribbean Grill

Lake Merritt Office District

The Lake Merritt Office District includes much of downtown’s premier office space. The 19th Street BART Station and the Alameda-Contra Costa Transit District (AC Transit) Uptown Transit Center serve the Lake Merritt Office District. Ground floors do not always meet the sidewalk in inviting ways, and the Kaiser Office Center building’s public rooftop open space is not easy to access. More recently, an increase in high-rise residential development has taken place in this area. The Lake Merritt Office District consists of an eclectic mix of low-, mid-, and high-rise buildings; surface parking lots; and areas for outdoor seating (see photo 5). Open spaces facing institutional, commercial, and residential building forms hug the



Photo 3- Frank H. Ogawa Plaza

Lake Merritt shoreline, with a primarily multi-family residential character south of 17th Street and east of Harrison Street, in what is referred to as the city's Gold Coast area. These residential buildings range from two-story buildings to high-rises. Below 17th Street and west of Harrison Street to Broadway is a primarily commercial area of low- and mid-rise masonry buildings with decorative elements.

Uptown

The area just north of the Central Core is known as the Uptown area and contains a mix of building types. To each side of Telegraph Avenue, the taller buildings of the Central Core give way to low- and mid-rise apartment buildings, two-story detached residential buildings, one-story light industrial buildings, and surface parking lots. North of the Uptown area, the dominant built form comprises single-lot, light industrial buildings. This lower built form contrasts with the high-rise office and institutional buildings in a campus-like setting located east of Broadway between Grand Avenue, Lake Merritt, and 17th Street. Several of Oakland's historic large-scale entertainment venues are in the area, including the Fox and Paramount Theatres, see photos 7 and 8. More recently, smaller scale theaters and art galleries have located to the area. Newly developed housing in residential and mixed-use buildings fill the center of the neighborhood, see photo 9.

Koreatown/Northgate

The Koreatown/Northgate (KONO) neighborhood has small storefronts along Telegraph Avenue that include a variety of multi-ethnic businesses (as shown in photo 10) mixed with local independent maker spaces, art galleries,



Photo 4- Tribune Tower



Photo 5- Outdoor Seating

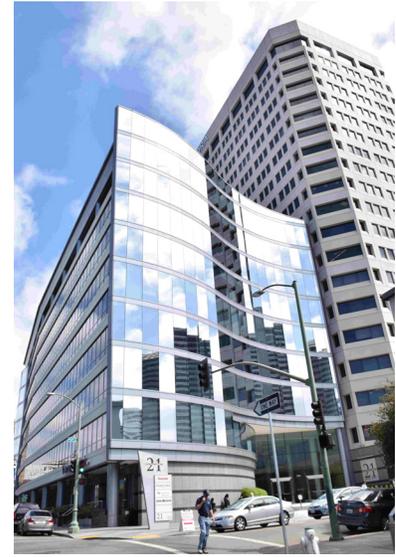


Photo 6- High-Rise Building



Photo 7- Paramount Theatre



Photo 8- Fox Theatre



Photo 9- Newly Developed Residential Building

bars, (as shown in photo 11), and restaurants. East of Telegraph Avenue, existing smaller-scale production buildings establish a unique character in the historic 25th Street Garage District, which has a robust arts and entertainment scene. Originally an industrial and auto repair area, many of the buildings in the 25th Street Garage District area today have been converted into art galleries and maker spaces (as shown in photo 12 and photo 13). The area also is scattered with some mid-rise residential, as shown in photo 14 and low-rise commercial buildings, as well as some single-family/duplex homes. The western boundary of the KONO area, Northgate Avenue, is a wide boulevard that primarily serves as a freeway access road, with few pedestrian amenities that act as a barrier in the neighborhood.



Photo 10- Small Commercial Storefront



Photo 11- Bar/Restaurant



Photo 12- Art Gallery



Photo 13- Art Gallery/Maker Space



Photo 14- Mid-Rise Residential

West of San Pablo

This area has a dispersal of modern-looking apartment buildings, Victorian homes (as shown in photo 15), historic structures, and SROs, as well as sporadic surface parking lots and unoccupied buildings. It consists of mostly older low- and mid-rise residential and commercial structures (as shown in photo 16). The area is also scattered with surface parking lots and a few newer mid-rise multi-family residential buildings. This neighborhood is cut off from West Oakland by the I-980 and has many wide, auto-centric boulevards. When construction of I-980 was completed in 1985, its 560-foot-wide excavated trench separated West Oakland from downtown. The neighborhood includes 17th Street and 20th Street, which are gateways to downtown and to West Oakland.



Photo 15- Victorian Home



Photo 16- Low to Mid-Rise Residential Building

Lakeside

Lakeside is an established neighborhood providing urban housing in a densely developed setting. It consists of mostly low- and mid-rise residential structures, as shown in photo 17, with some taller office buildings that block most views out of this area. Some prominent historic landmarks and cultural centers are contained in the neighborhood, including the Malonga Casquelourd Center for the Arts, as shown in photo 18, and the Scottish Rite Temple. Several mid- to high-rise residential towers are scattered near the eastern part of the Lakeside area, along the western shore of Lake Merritt.



Photo 17- Mid-Rise Residential Structures



Photo 18- Malonga Casquelourd Center for the Arts

Old Oakland

The Old Oakland area is wedged to the northeast quadrant of the I-980 and I-880 split, in the southwest of the Plan Area. It is comprised of historic buildings, residential communities, small shops, and business. The Old Oakland



Photo 19- Shops in Old Oakland



Photo 20- Streetscape in Old Oakland

neighborhood is best known for its historic, walkable, mixed-use center where two-to three-story brick commercial buildings on tree-lined streets create a strong sense of place for pedestrians, as shown in photos 19 and 20. In addition, there are also newer, four- to five-story residential and commercial developments interspersed with many of the older low-rise commercial buildings and single-family/duplex homes. Many of the façades in Oakland are decorated with bay windows, and ornamental trim and cornices. Preservation and enhancement are the primary goals in the core of this area. Despite the concentration of buildings and shops along 9th Street, there are several underutilized surface parking lots nearby along 7th and 8th Street. Currently, the blocks at the southern edge of the neighborhood facing into the I-880 freeway contain large-scale buildings with civic uses, including the Oakland Police Department (see photo 21), County Courthouse, and Detention Center (see photo 22). To the north, the neighborhood is defined by the Oakland Convention Center, which spans the former Washington Street right-of-way between 10th and 11th Street. Together, these “super-block” developments alter the Old Oakland street grid, lengthen walking distance, disrupt the historic and contextual pattern with the surrounding blocks, create barriers between Old Oakland and the rest of downtown, and obstruct views out of the area to Chinatown.

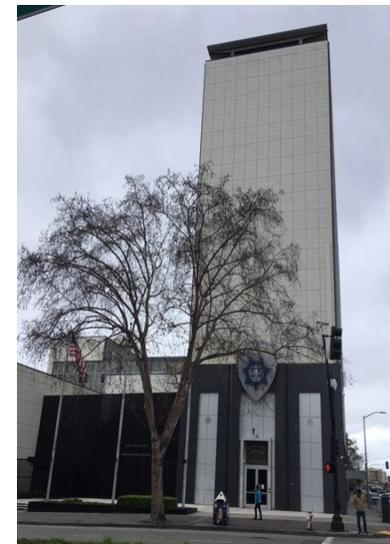


Photo 21- Oakland Police Department



Photo 22- Detention Center

Laney College

Laney College is one of the four colleges of the Peralta Community College District and is located east of the Lake Merritt BART Station. The Lake Merritt Channel separates the Laney College

Main Campus, located on Fallon Street, from the Athletics Campus. The Main Campus also includes a large parking lot along 7th Street adjacent to I-880, as well as academic and administrative buildings that are clustered together in a complex in the northern corner of the campus. On one corner is the triangular “Laney Tower,” the nine-story, main administration building that is the tallest structure on the campus.

Jack London

The Jack London District is in the southernmost portion of the Plan Area. This area primarily contains one- to four-story current and former industrial buildings (see photo 23) and surface parking lots. This built environment is interspersed with newer, four- to six-story residential and commercial developments (see photo 24). Jack London has changed over the past 30 years from



Photo 23- Former Industrial Building



Photo 24- Newer Residential Building

primarily industrial and distribution uses to housing, retail, dining, entertainment, office, and maker uses. The area contains important cultural and historic resources including festivals and events in Jack London Square; the historic Waterfront Warehouse District and the historic Produce Market (see photo 25), both rated as Areas of Primary Importance; individual landmarks; and some of Oakland’s earliest buildings. For further discussion of Historic Resources, see *Chapter V.E, Cultural and Historic Resources*. Jack London is separated from the rest of Downtown Oakland by the I-880 underpasses, where poor lighting, loud vehicle noise, many lanes of freeway-bound traffic, and a sense of disrepair discourage pedestrian activity.



Photo 25- Produce Market

(1) Plan Area Vicinity

Chinatown

Chinatown is integral to the greater downtown, and is bordered by the Plan Area on three sides. Chinatown is defined by 7th Street to the south, 13th Street to the north, Broadway to the west, and Fallon Street to the east—an area that was included in the Lake Merritt Station Area Plan. The Lake Merritt Station Area Plan was adopted in 2014 and addresses improvements and changes to development intensity and character. Although Chinatown is not included in the Plan Area, the impacts of the Downtown Plan on Chinatown are fully evaluated in this EIR.

Chinatown contains several historic areas as well as a cluster of Asian-influenced businesses and restaurants that attract both locals and visitors (see photo 26). Chinatown has two super-blocks of modern, mid-rise buildings as well as an older mix of one- to four-story residential, commercial, and mixed-use buildings on small lots extending eastward to Madison Park, located between Jackson Street and Madison Street and between 8th and 9th Street. Clusters of commercial uses in the Chinatown area are characterized by bright awnings and sidewalk merchandise displays.



Photo 26- Chinatown shops on 9th Street between Broadway and Franklin

Lake Merritt and the Estuary

Lake Merritt and the Oakland Estuary provide a linear open space accessible to the eastern portion of the Plan Area. Narrow bands of wetlands occur in some locations along the margins of this open space. The circumference of the lake measures 3.4 miles and covers 155 acres. Lake Merritt serves as one of the many stopovers along the Pacific Flyway for migratory birds. Further discussion is provided in *Section V.G, Biological Resources*. The Oakland Estuary is a strait between the island of Alameda and the Plan Area's southern border, stretching from the Port of Oakland on the west to Fruitvale Bridge on the east. The Oakland waterfront adjacent to the estuary is now developed with industrial and commercial uses.

Howard Terminal

Howard Terminal is approximately 55 acres and is located adjacent to the Plan Area at the Port of Oakland along the Inner Harbor of the Oakland-Alameda Estuary. Existing uses and activities include truck parking, loaded and empty container storage and staging, and longshore training facilities. The site was used as a maritime container terminal until 2014. The site also includes a small wharf structure. A below grade rock dike sits adjacent to the Oakland Inner Harbor as the site's shoreline. Four cranes are located on Howard Terminal that were used to load/unload ships when the area was an active shipping facility.

(2) Surrounding Area

Visual Character to the North

Distinct features that help to define the visual character north of the Plan area are the several distinctively designed 'flatiron' buildings, such as the historic Arnstein-Field & Lee Star Showroom at the intersection of Broadway and Webster Street, and a number of extra wide sidewalks, such as 27th Street and Broadway, and 25th Street and Broadway, which are used for a combination of public space and automobile showcases. The overall lower lot coverage reflects the concentration of automotive uses. The overall visual character to the north of the Plan Area reveals that it was once cohesive in its emphasis of automobile-related uses and can now be described as irregular and inconsistent in terms of the physical forms it contains. While the auto business has shown a more recent improvement, the long-term outlook for the automobile market in the Broadway Valdez District Specific Plan Area is in transition, as numerous tall new buildings have been or are under construction.

Visual Character to the East

To the southeast of the Plan Area is the Chinatown neighborhood, which comprises a few super-blocks of modern, mid-rise buildings as well as an older mix of one-to four-story residential,

commercial, and mixed-use buildings on small lots that extend eastward to Madison Park. Clusters of commercial uses in the Chinatown area are characterized by bright awnings, vendors spilling onto sidewalks, and active streets which are supported by pedestrian scrambles.

As part of the Lake Merritt Station Area Plan there are going to be anticipated changes around the Lake Merritt BART Station as transit-oriented development is implemented. The Oakland Auditorium is also located to the east of the Plan Area. The Oakland Auditorium is a 1915 Beaux-Arts style building at the south end of Lake Merritt and is a visually prominent building. Lake Merritt and the Oakland Estuary provide an open visual character which is both pristine and natural.

Light industry east of the Jack London District, near Victory Court and south of Fallon Street, is transitioning into an urban residential area with significant parks and open space with the implementation of Brooklyn Basin.

Visual Character to the South

The Oakland Estuary and San Francisco Bay provide a natural border for the Plan Area's southern border. The City of Alameda is further south of the Plan Area with the Oakland Estuary separating the two cities.

Visual Character to the West

I-980 separates downtown from West Oakland and surrounding neighborhoods. The West Oakland Specific Plan boundary and I-980 abut the western boundaries of the Plan Area. Mirroring some of the same visual character to the north and east of the Plan Area, West Oakland contains a mix of small-scale commercial buildings, new residential buildings of moderate height, and four-to-five story buildings as well as more historic residential structures. In addition, Schnitzer Steel, a heavy industrial business, is located west of Howard Terminal and processes and recycles raw scrap metal. Howard Terminal currently has activities such as truck parking, loaded and empty container storage and staging, and longshore training facilities.

b. Views to and through the Plan Area

Due to the densely built urban environment and relatively flat topography of the Plan Area, short-range views of and through the Plan Area (those less than 0.25-mile from the area) are mostly limited to surrounding streets and nearby public open spaces, such as Lakeside Park on Lake Merritt; Snow Park at Harrison Street and 19th Street; Jefferson Square Park on 7th Street; Madison Park on 9th Street; and Lafayette Square on 11th Street. Existing views are interrupted by varying building heights. Dynamic short-range views are available to riders traveling along highways within and adjacent to the Plan Area, such as along I-880 and I-980. Mid- and long-

range views of the Plan Area (approximately 0.5 mile from the area) are available from other public open spaces and streets within the City of Oakland, as well as from neighboring jurisdictions—such as from Shoreline Park in the City of Alameda, located approximately in the middle of Alameda on the northern shore or the Bay Bridge eastbound lanes—although the visually prominent features in the views are the upper stories of the high-rise buildings. Views eastward through the Plan Area include some of the Oakland and Berkeley Hills, but view corridors through the Plan Area provide limited views of protected scenic resources, as identified in the City's General Plan.

c. Views From the Plan Area/Scenic Vistas

Scenic vistas are corridors that capture the total field of vision from a specific viewpoint; they generally encompass a larger geographic area for which the field of view can be quite wide. Scenic vistas are formed by built and natural elements that guide lines of sight and control view directions available to pedestrians and motorists. Scenic vistas generally include elements of high scenic value or visual prominence. Scenic views identified in the Oakland General Plan include:

- Views of the Oakland hills from the flatlands;
- Views of downtown and Lake Merritt;
- Views of the shoreline; and
- Panoramic views from Skyline Boulevard, Grizzly Peak Blvd, and other hillside locations.

Views from the Plan Area include some views of the Oakland hills from the flatlands, views of downtown and Lake Merritt, and views of the shoreline, as described in the paragraphs below. Given that the Plan Area is not located in the hills, panoramic views from Skyline Boulevard, Grizzly Peak Road, and other hillside locations are not possible.

Views from the core of the Lake Merritt Office District area (around 14th Street and Broadway) are generally limited to the surrounding existing structures. However, near Thomas L. Berkeley Way and Grand Avenue, and along Harrison Street/Lakeside Drive, views of Lake Merritt become visible and provide high-quality views. Views looking east include Lake Merritt, several of the attractions along the northern shore of the lake (near 20th through 17th street), and many of the low-, mid-, and high-rise buildings that line the lake's southern and western shore near Lake Merritt Boulevard. While partially obstructed by some surrounding structures, views of the Oakland/Berkeley Hills can be seen when looking north and northwest from this area as well.

Views near the eastern part of the Lakeside area along Lakeside Drive include Lake Merritt and many of the low-, mid-, and high-rise buildings that line the Lake's southern and western shore (such as partial views of the Alameda County Superior Courthouse). Looking north along the perimeter of the Lakeside area provides views of the northern shore of the Lake, and many of high-rise buildings to the north of Lake (such as the Kaiser Permanente Corporate Offices, and

1999 Harrison , and, while partially obstructed by these structures, some views of the Oakland/Berkeley Hills can be seen.

Most views from the West of San Pablo area (near 17th and 20th Street) are blocked by structures inside and outside of the area, particularly to the west, where I-980 and its associated landscaping create a visual barrier (at Castro Street). In Uptown, due to the width of Telegraph Avenue, some views to the south allow for sights of the Central Core area's high-rise structures (such as the Chase Building on 14th and Broadway) and views to north allow for some very limited sights of the Oakland/Berkeley Hills.

Views from Jack London District are typically limited due to the surrounding low-rise development and I-980 and I-880 freeways as well as several mid-rise structures such as the Glenn Dyer Detention Facility. However, the Jack London District does provide some high-quality views, primarily along the southern Oakland shoreline. Views along the shore include the Oakland Inner Harbor, which spans from east to west. Views south towards the city of Alameda's harbor are also accessible along the coast, and block views of the San Francisco Bay. Views to the east include the Oakland shipping yards, including Howard Terminal, with the iconic shipping container cranes as shown in photo 27. Beyond the Oakland Inner Harbor, the San Francisco skyline can be seen far off in the distance as well.



Photo 27- View of San Francisco from Jack London Square

d. Scenic Highways/Routes

The City of Oakland General Plan's Scenic Highway Element defines scenic routes as "distinctively attractive roadways that traverse the City, and the visual corridors which surround them." Scenic routes include officially designated State scenic highways, municipally designated City roadways, or informally recognized local scenic byways.⁶ Further discussion of scenic highways/routes can be found below in Regulatory Setting.

e. Light and Glare

The Plan Area is in a built-out urban environment that has existing sources of light and glare associated with land uses typical for an urban setting. Light and glare associated with uses in the City Center, in particular, are emitted upward and outward by high-rise buildings, and may be emitted in a broader, lower level in large parking lots and from institutional uses, such as Laney College, as well as from commercial uses and vehicular use. Light and glare are also associated with streetlights and luminaries on major arterials and interstate highways that traverse or border the Plan Area, such as I-980 and I-880.

f. Shadow

Shadow conditions within the Plan Area are typical of shadow conditions in built-out urban environments. Shadow is most prevalent in the City Center, where the high-rise buildings shade nearby public and private properties, especially during the morning and afternoon hours during late fall and early winter, when the sun is lowest on the horizon. Taller buildings in the area around Jack London Square, along Grand Avenue, and along 12th, 14th, and Oak Street in the eastern portion of the Plan Area, also cast longer shadows during this time.

g. Wind

The Plan Area lies within a climatological sub region of the San Francisco Bay Area Air Basin where the marine air that travels through the Golden Gate, as well as across San Francisco and the San Bruno Gap, is a dominant weather factor. The Oakland-Berkeley Hills cause the westerly flow of marine air to split off to the north and south of Oakland; this phenomenon tends to diminish wind speeds in Oakland.

Wind flow is generally from the west, and average wind speeds vary from season to season with the strongest average winds occurring during summer and the lightest average winds during

⁶ City of Oakland, 1974. Scenic Highways: An Element of the Oakland Comprehensive Plan, page 1, September.

winter. Together, the west, north-northwest and south-southeast winds are the most frequent winds that exceed 25 miles per hour (mph).

Wind conditions within the city result from the interaction of the approaching wind with the physical features of the environment—buildings, topography and landscape. In cities, groups of structures tend to slow the winds near ground level, due to the friction and drag of the structures themselves, but this leaves the air mass that flows well overhead to continue with little slowing. However, a building that is much taller than surrounding buildings will intercept and redirect winds that might otherwise flow overhead, and bring those winds down the vertical face of the building to ground level, where they create ground-level wind and turbulence. These redirected winds can be relatively strong and also relatively turbulent, and can be incompatible with the intended uses of nearby ground level spaces such as plazas and sidewalks. Moreover, structures that present very large surfaces square to strong winds can create ground-level winds that can be bothersome to pedestrians and also impact load on mature trees, resulting in unexpected limb or tree failures.

2. Regulatory Setting

This subsection discusses applicable regulatory provisions, including State Regulations, policies from the City of Oakland’s General Plan, Planning Code, and SCAs. A detailed discussion of the Plan’s compatibility with the General Plan and other relevant planning policies is discussed in *Chapter IV, Planning Policy*.

a. 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. Within Oakland, I-580 from the San Leandro city limit to State Route (SR) 24 (post miles 34.5 to 45.1) is an officially designated State scenic highway. The entire length of I-580 within Oakland is identified as a designated scenic route in the City of Oakland General Plan.

The City’s other designated Scenic Route is the Skyline Boulevard/Grizzly Peak Boulevard/Tunnel route through the Oakland Hills. The City’s Scenic Highways Element does not designate SR-24 as a scenic highway; however, the California Department of Transportation does designate SR-24

as a scenic highway. This designation only pertains to the portion of SR-24 between the east portal of the Caldecott Tunnel to SR-680⁷, which is not within the City of Oakland.

There are no officially designated or eligible State scenic highways within or immediately adjacent to the Plan Area.

b. City of Oakland

(1) City of Oakland General Plan

Land Use and Transportation Element (LUTE)

The Land Use and Transportation Element of the General Plan affects visual resources primarily by shaping broad-based land use patterns in the City. Applicable policies and objectives are:

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 D2.1: Enhancing the Downtown. Downtown development should be visually interesting, harmonize with its surroundings, respect and enhance important views in and of the downtown, respect the character, history, and pedestrian-orientation of the downtown, and contribute to an attractive skyline.

Policy W2.10: Making Public Improvements as Part of Projects. Physical improvements to improve the aesthetic qualities of the waterfront, and increase visitor comfort, safety, and enjoyment should be incorporated in the development of projects in the waterfront areas. These amenities may include landscaping, lighting, public art, comfort stations, street furniture, picnic facilities, bicycle racks, signage, etc. These facilities should be accessible to all persons and designed to accommodate elderly and physically disabled persons.

Policy W3.2: Enhancing the Quality of the Natural and Built Environment. The function, design and appearance, and supplementary characteristics of all uses, activities, and facilities should enhance, and should not detract from or damage the quality of, the overall natural and built environment along the waterfront.

Policy W3.4: Preserving Views and Vistas. Buildings and facilities should respect scenic viewsheds and enhance opportunities for visual access of the waterfront and its activities.

⁷ California Department of Transportation (Caltrans), 2017. California Scenic Highway Mapping System. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed March 1, 2019.

Policy W10.7: Jack London Square Area Design Criteria. Developments in this area should be designed to enhance direct access to and along the water's edge, maximize waterfront views and vistas, and make inviting public pedestrian access and spaces. Development and amenities must be sensitive to the surrounding character of pedestrian-oriented activities with focus on cultural and retail entertainment. Traditional and historic buildings and structures are character defining and should be preserved, adapted for new uses, or integrated into new development, where feasible.

Open Space, Conservation, and Recreation (OSCAR) Element

The OSCAR Element promotes the preservation and good design of open space, and the protection of natural resources to improve aesthetic quality in Oakland. The following policies are relevant to visual resources concerns associated with the Specific Plan.

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 activities.

Policy OS-2.5: Urban Park Acquisition Criteria. Increase the amount of urban parkland in the seven planning areas, placing a priority on land with the following characteristics (not in priority order):.....(c) land with visual or historical significance...(g) land that is highly visible from major streets, or that is adjacent to existing public buildings, particularly police and fire stations.

Policy OS-4.4: Elimination of Blighted Vacant Lots. Discourage property owners from allowing vacant land to become a source of neighborhood blight, particularly in residential areas with large vacant lots.

Policy OS-6.4: Lake Management. Manage Oakland's lakes to take advantage of their recreational and aesthetic potential while conserving their ecological functions and resource value. Discourage new recreational uses which impair the ability of lakes to support fish and wildlife. Support improvements which enhance water circulation, water quality, and habitat value, provided they are cost effective and are compatible with established recreational activities.

Policy OS-7.3: Waterfront Preservation. 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 of endangering public safety.

Policy OS-9.2: Use of Natural Features to Define Communities. Use open space and natural features to define city and neighborhood edges and give communities within Oakland a stronger sense of identity. Maintain and enhance city edges, including the greenbelt on the eastern edge of the city, the shoreline, and San Leandro Creek. Use creeks, parks, and topographical features to help define neighborhood edges and create neighborhood focal points.

Policy OS-9.3: Gateway Improvements. Enhance neighborhood and city identity by maintaining or creating gateways. Maintain view corridors and enhance a 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.

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: Minimize Adverse Visual Impacts. Encourage site planning for new development which minimizes adverse visual impacts and take 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.

Policy OS-11.1: Access to Downtown Open Space. Provide better access to attractive, sunlit open spaces for persons working or living in downtown Oakland. The development of rooftop gardens is encouraged, especially on parking garages.

(2) City of Oakland Municipal Code

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.

Chapter 9.16.060: Lighting

No person shall make any electric service connection to, or supply any electrical energy to any ornamental street lighting installation until the Electrical Department has inspected and approved such installation, and determined its conformance to the applicable rules and regulations of the city.

Chapter 15.52: Views

This chapter establishes standards for the resolution of view obstruction claims to provide a reasonable balance between trees and view-related values for both private views and protected public view corridors.

(3) City of Oakland Planning Code

The design of new projects in Oakland are subject to performance criteria that are utilized as part of the City's design review process. These criteria address the projects related to the surrounding visual character, as well as public and private investments in the area. Projects are evaluated based on site, landscaping, height, bulk, arrangement, texture, materials, appurtenances, and other characteristics. Conformance with the Oakland General Plan and any other design guidelines or criteria is also considered.

(4) City of Oakland SCAs and Uniformly Applied Development Standards Imposed as SCAs

The City's SCAs that are relevant to aesthetics are listed below. The SCAs are adopted as requirements for all projects approved with the City of Oakland.

SCA-AES-1: Landscape Plan (#18)

Landscape Plan Required: 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/oako42662.pdf> and <http://www2.oaklandnet.com/oakca1/groups/pwa/documents/form/oako25595.pdf>, respectively), and with any applicable streetscape plan.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

Landscape Installation: 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.

When Required: Prior to building permit final

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

Landscape Maintenance: 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

SCA-AES-2: Lighting (#19)

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.

When Required: Prior to approval of construction-related permit

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-AES-3: Underground Utilities (#85)

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section describes environmental impacts related to the City's aesthetic resources significance criteria that do not relate to scenic vistas, scenic resources, and visual character that could result from the implementation of the Specific Plan and reasonably foreseeable development expected to occur under the Plan. A discussion of how implementation of the Specific Plan relative to scenic vistas, scenic resources, and visual character is provided for informational purposes (Criteria 1-3) to assist in evaluating the merits of the project, but this discussion is not considered significant in areas such as the Plan Area (see discussion above). The latter part of this section presents the impacts associated with the Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would result in a significant aesthetic impact if it would:

4. Have a substantial adverse effect on a public scenic vista.
5. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, located within a state or locally designated scenic highway.
6. Substantially degrade the existing visual character or quality of the site and its surroundings

7. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the areas. (not a CEQA consideration).
8. 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).
9. 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.
10. Cast a shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space.
11. 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.
12. 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.
13. Create winds exceeding 36 mph for more than one hour during daylight hours during the year.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Specific Plan's Potential Effects Related to Scenic Vistas and Resources and Visual Character

The Specific Plan's relationship to the aesthetics criteria (Criteria 1-3) is described below for informational purposes and to provide context for review of the Plan's merits. As discussed above, any effects of implementation of the Plan related to these topics are not considered significant.

(1) Public Scenic Vistas

This analysis recognizes that the value of a scenic vista is subjective and dependent on the individual preferences; therefore, the analysis focuses on scenic vistas of public importance identified in City planning documents. The OSCAR element of the City of Oakland General Plan identifies views of the following as scenic resources that need to be protected:

- Views of the Oakland hills from the flatlands;
- Views of downtown and Lake Merritt;
- Views of the shoreline; and
- Panoramic views from Skyline Boulevard and Grizzly Peak Road--*views are not afforded given that the Plan Area is not located in the hills.*

Views of the Oakland Hills from the Flatlands

Given the height of the existing buildings in much of downtown, and the relatively flat topography in the Plan Area, views of the hills are generally afforded in areas of open space, such as Lake Merritt, or on elevated highways such as the I-880 and I-980. Views of the Oakland and Berkeley hills from the flatlands can be seen along the shores of Lake Merritt. The greatest views of the hills are afforded from the western portion of the Lake near the Lake Merritt Amphitheater, and along Lakeshore Avenue. Limited views of the hills are also afforded on Telegraph Avenue and Broadway heading north from 15th street to the northern end of the Plan Area. Although taller new buildings would be noticeable to residents, workers, and visitors in the immediate vicinity of individual development projects, these developments would not result in substantial changes to the overall urban scale considering the existing variable nature of the buildings heights and volumes throughout the Plan Area and surrounding neighborhoods. The new buildings would not substantially change views from the flatlands to the hills.

Views of Downtown and Lake Merritt

As described in the setting section above, views of Lake Merritt are available from areas around the Lake Merritt Office District. The Lake Merritt Office District is described as a transformational opportunity area in the Specific Plan, and this area will be downtown's premier office hub, featuring the tallest and most dense development downtown. Views from the core of the Lake Merritt Office District area are generally limited to the surrounding existing structures. However near the intersection of Thomas L. Berkeley Way and Grand Avenue and along Harrison Street/Lakeside Drive, views of Lake Merritt, several of the attractions along the northern shore of the Lake, and many of the low-, mid-, and high-rise buildings that line the Lake's southern and western shore become visible. In addition, views along Lakeside Drive including Lake Merritt and

many of the low-, mid-, and high-rise buildings that line the Lake's southern and western shore are also visible.

Views of City Hall and Frank Ogawa Plaza are afforded from immediately surrounding streets such as 14th and Franklin. Views of the Tribune Tower (which is approximately 300 feet tall) can be seen from 13th Street all the way west to Franklin. Even though there are many other taller buildings adjacent to the Tribune Tower, views of Tribune Tower are afforded from the lake on 12th, 13th, and 14th Streets or in parts of Oakland southeast of downtown.

Existing heights in the majority of the Lake Merritt District are currently unlimited with floor area ratios (FAR)s of 20.0, as shown in *Chapter III, Project Description* Figure III-9 and Table III-2. The proposed draft heights for the Lake Merritt District area would not change those unlimited heights, as shown in *Chapter III, Project Description* Figure III-11. FARs in the Lake Merritt District would increase from 20.0 to 30.0 in the core of the district, as shown on *Chapter III, Project Description*, Figure III-9. Densities in the Lake Merritt District would increase as well as shown on *Chapter III, Project Description*, Figure III-10. The Lake Merritt District area includes priority office sites, and while these buildings have the capacity to be more intense (given the proposed increase in FAR and density, development in this area is already quite dense, and would not substantially change from existing conditions. In Lakeside, there are some places where heights, FAR, and density would increase from existing conditions. Height limits near 17th and Alice/Jackson/Madison streets would change from 55 feet to 65 feet (near Alice and Jackson) and 85 feet near Madison. FAR and density would increase throughout the Lake Merritt District from 14th Street to 17th Street west to Harrison Street. New structures would be added in a way that is intended to fill in the gaps in the street wall and result in a more cohesive look for each district in the Plan Area.

As discussed in *Chapter III, Project Description*, this EIR is based on the Downtown Oakland Public Review Draft Specific Plan dated August 2019, which sets forth a reasonably foreseeable development expected in the Plan Area over the next 20 years. Proposed height, FAR limits, and density, in combination with the City's projected Downtown Oakland Development Program, encourage development. The tallest structures would be located along the central-most parcels of the Plan Area, Central Core, and Lake Merritt Office District. This is an area where mid- and high-rise buildings already exist and where new towers are not expected to adversely affect views of Lake Merritt and the Oakland hills within or through the Plan Area. Although taller and more dense new buildings would be noticeable to residents, workers, and visitors in the immediate vicinity of individual development projects, these developments would not result in substantial changes to the overall urban scale considering the existing variable nature of the buildings heights and volumes throughout the Plan Area and surrounding neighborhoods. The new buildings would not substantially change views of downtown and Lake Merritt.

Views of the Shoreline

Views of the shoreline from Jack London Square are at the southern edge of the Plan Area. Proposed intensity in this area including height, FAR and density would be increased from existing conditions.

The Specific Plan proposes revisions to the intensity (height, FAR, and density) that would encourage or discourage specific land uses within the Plan Area and would channel specific uses according to areas where they have been determined to be most appropriate (the proposed general plan amendments, zoning, and draft intensity changes are discussed in detail in *Chapter III, Project Description*). In certain areas, the proposed land use changes would also allow for an increase in density and could result in the construction of different building types, scales, and architecture over time as compared to existing conditions. Although taller new buildings would be noticeable to residents, workers, and visitors in the immediate vicinity of individual development projects, these developments would not result in substantial changes to the overall urban scale considering the existing variable nature of the buildings heights and volumes throughout the Plan Area and surrounding neighborhoods.

(2) Scenic Resources

The State Scenic Highways in Alameda County area are as follows:

- I-580, from the San Joaquin County line to SR-205, and from San Leandro city limits to SR-24 in Oakland.
- I-680, from Mission Boulevard in Fremont to the Contra Costa County line.⁸

As described above in Regulatory Setting, there are no officially designated or eligible State scenic highways within or immediately adjacent to the Plan Area. The Plan Area is located approximately 0.5 miles south of the State Scenic Highways segment of Interstate 580 that terminates at SR-24. Development under the Specific Plan is not expected to significantly alter views of scenic resources by motorists from I-580 given its distance from the 580. In addition, height increases, FAR increases, and density increases in this area are not substantial. The KONO district, which is the northernmost portion of the Plan Area, has proposed height limits of 85 feet with pockets of 65 feet between 25th and Sycamore Street as well as between 25th and 26th Street. Proposed FARs range from 12.0 at their most intense (in the northern most portion of KONO) to 2.0. Density in KONO would increase from existing ranges of 450 to 225 square feet per unit to 300 to 110 square feet per unit. The draft proposed heights, FAR, and density for most of KONO would be increased from existing conditions; however, overall, the height, FAR and

⁸ Ibid.

density changes in this area would not be substantial and would minimally affect scenic resources within a State Scenic Highway.

(3) Visual Character

The Plan is a regulatory program and would result in new planning policies and controls for land use to accommodate additional jobs and housing. Although the Plan would establish a policy and regulatory framework that if, carried out, could alter the urban form of the Plan Area, the Plan itself would not result in direct physical change to its existing visual character that would conflict with applicable General Plan, Zoning, or other regulations governing scenic quality. Any changes in urban form and visual quality would be the result of subsequent individual development projects allowed under the Plan. Street network changes and public realm improvements could also have physical effects. This analysis focuses on the Plan's potential to affect the existing visual character of the Plan Area and surrounding areas, based on the Plan's proposed changes to maximum building heights, allowed land uses, and proposed design elements. Adoption of and development under the Plan is intended, among other objectives, to improve the visual character of the Plan Area by activating the street frontage and improving the physical appearance of existing structures and the public realm. Physical changes are likely to occur as a secondary effect from the revisions to the General Plan and proposed draft intensities throughout the Plan Area. Visual effects of new uses that may be foreseeable under the Plan would be most prevalent and encouraged in areas where the Plan would allow for construction of taller buildings compared to existing conditions, as laid out in the following two policies.

Policy E-2.2: Promote density and a mix of transit-supportive uses at regional transportation hubs, such as BART stations Amtrak stations, ferry terminals and major AC Transit multi-route stops.

Policy LU-1.2: Encourage incremental development to fill in gaps in the existing urban fabric, while also identifying opportunities for larger and more transformative developments.

Policy H-1.1: As part of the updates to zoning and development incentive program, adjust the zoning in identified areas of opportunity to create new high-intensity, mixed-use neighborhoods.

The implementation of the Specific Plan would affect the visual character of the Plan Area through the application of its land use regulation changes, public realm improvements, and street network changes. A discussion of how these changes would affect each district, as well as an overall summary of how the Specific Plan and its associated development would impact the existing visual character and quality of the Plan Area and its surroundings, is provided below.

Central Core

The Central Core area under the Specific Plan would continue to be a hub for office, commercial, and civic-related activity in Oakland. Proposed intensity in this area as a result of the Specific Plan would continue to mirror the existing pattern of office and commercial development (as shown in

Photo 28), which imposes on a current aerial photo potential illustrative massing on opportunity sites identified in the Specific Plan, as well as anticipated development that is happening independent of the Specific Plan (approved and under construction). At the street level, the retention of local businesses would be prioritized, and the Black Arts Movement and Business District would influence the design of public art, signage, shopfronts, and streetscapes (particularly along 14th Street), providing a distinct identity. New development would fill in underutilized sites, creating a consistent street wall that enhances the pedestrian experience.



 DOSP Potential Future Development  Anticipated Development (Approved/Under-Construction)

Photo 28- Aerial View of Central Core Looking South Down San Pablo Avenue

Lake Merritt Office District

Much like the Central Core area, the Lake Merritt Office District under the Specific Plan would continue to grow with buildings of greater intensity and would continue to contain the most intense development found in downtown, but with a greater focus on office development. "Office priority" sites, as described in *Chapter III, Project Description*, would ensure that new office and employment space is maximized on key opportunity sites. Photo 29 shows an aerial view of Lake Merritt Office District looking northwest, which imposes on a current aerial photo illustrative massing on opportunity sites identified in the Specific Plan, as well as anticipated development that is happening independent of the Specific Plan (approved and under construction). Figure V.F-1 includes a visual simulation of Franklin and 20th Street. New buildings would reinforce the pedestrian realm with active facades and awnings, while bike lanes and wide sidewalks would increase mobility options. These changes would gradually transition the Lake



Photo 29- Aerial View of Lake Merritt Office District Looking Northwest

Merritt Office District to a visual environment more commonly associated with the central business districts of medium and large metropolitan centers.

Uptown

Uptown would continue to serve as one of downtown’s most vibrant entertainment areas as envisioned in the Specific Plan. Several opportunity sites that would become a vibrant entertainment area have been identified in Uptown on vacant lots and surface parking lots. The development of the surface parking lots and vacant lots in Uptown, consistent with the Specific Plan, is intended to create buildings with transparent windows along ground floors and well-designed storefronts, enhancing the visual quality of these sites as compared to existing conditions.

Koreatown/Northgate

As part of the Specific Plan, KONO would continue to grow as an art, maker, and entertainment destination. New development would include strategic infill, the re-purposing of historic buildings, and the retrofitting of parking garages with active frontages. 25th Street, the heart of the Garage District, could have thriving industrial, makerspace, and arts uses. There would be increased height, FAR and/or density along 24th, 26th, and 27th Streets, Telegraph Avenue, and

Existing Conditions



Proposed Conditions



Source: Dover, Kohl & Partners, 2019

West Grand Avenue. An arts and cultural overlay zone would provide additional incentives and restrictions within the Garage District to retain its existing character.

West of San Pablo

Under the Specific Plan, the area west of San Pablo would maintain quaint pockets of smaller scale and historic buildings, some of which have been adapted for new uses, with new strategic infill development that closely matches the scale of existing, surrounding structures. Greater intensity permitted near the Central Core and along San Pablo Avenue would allow the neighborhood to accommodate more residents and workers, though any developments adjacent to historic properties would need to comply with existing zoning to step down in height and bulk to allow for a better physical transition. Figure V.F-2 illustrates improvements that could occur along 17th Street to create a more inviting entry into downtown. While Figure V.F-2 illustrates a change in visual character, added street improvements such as bike lanes, wider sidewalks, and decorative murals contribute to the existing urban fabric of the neighborhood. New development would be focused on underutilized parcels with low visual quality, such as the surface parking lot in the left of the existing conditions photo.

Lakeside

The Specific Plan envisions new development in the Lakeside that would blend with existing historic and high-quality buildings. This incremental infill development would fill in longstanding gaps in the existing block network and help to further activate the neighborhood. The lower heights maintained in the Lakeside District would help retain the diversity of housing types available downtown and preserve the existing character of the neighborhood.

Old Oakland

Old Oakland would remain a neighborhood retail and dining destination. The Specific Plan would propose additional residential units in the neighborhood, retail and neighborhood commercial, some office space, and a few flex commercial spaces. Heights and densities in Old Oakland will remain unchanged, except for a portion near the I-980 along 14th Street and south of 12th Street between Castro and Martin Luther King Jr. Way, and a portion south of 8th street between Clay and Broadway. There are minor FAR increases along the border of I-980 from 14th Street to the I-880.

Chinatown

The Specific Plan boundary does not include Chinatown. Therefore, this Draft EIR does not evaluate changes to character and intensity for the areas of Chinatown defined by 7th Street to the south, 13th Street to the north, Franklin Street to the west, and Fallon Street to the east.

Existing Conditions



Proposed Conditions



Source: Dover, Kohl & Partners, 2019

Areas of Chinatown were addressed by the Lake Merritt Station Area Plan EIR, which was adopted in 2014.

Jack London

The Jack London District under the Specific Plan would include a mix of flex industry, mixed-use urban residential, mixed-use urban residential, and mixed-use pedestrian corridor I and II (low to medium intensity). The land use character at the heart of Jack London District's industrial core, centered on 3rd Street, would remain flex industry. Under the Howard Terminal Option, the land use character would be flex mixed-use, meaning that the form and character of the proposed Jack London Maker District (along 3rd Street) would not be preserved in this option. There would be increased height, FAR and density on key sites near I-880 and near the waterfront and more interactive design and uses at the street level. Several areas in the Jack London Although this area contains the bulk of the General Plan amendments proposed under the Specific Plan, many of these amendments are intended to protect the boundaries of the Estuary Policy Plan's Produce Market land use designation, which is intended to retain the historic architectural character and integrity of the Produce Market District.⁹ Improvements to Estuary Park, including new trails, walkways, and a pedestrian/bike bridge, would help strengthen connections between Laney College, Jack London and the rest of downtown.

Laney College

In addition to the improvements completed as part of the Laney College Facilities & Technology Master Plan, new mixed-use development on the Laney College surface parking lot adjacent to I-880 and the Peralta Community College site between 5th Avenue and the Lake Merritt Channel would provide new student and teacher housing, flexible ground-floor spaces, and new institutional and educational facilities. New mid- to high-intensity developments on the Laney College Main Campus would change the existing visual character of the neighborhood, where currently there is a Main Campus and athletic fields.

The Specific Plan envisions adding jobs, training, and services close to BART and Amtrak. Laney College's campus improvements would add new streets and open spaces for pedestrian, bike, and vehicle circulation, and provide access to the Lake Merritt Channel.

Street Network Changes

As stated in *Chapter III, Project Description*, implementation of the Specific Plan would include upgrades to the pedestrian network, bicycle network, transit network, and vehicle network. The

⁹ City of Oakland and Port of Oakland, 1999. Estuary Policy Plan, June.

Plan proposes conversions of one-way streets to two-way streets on 7th, 8th, 9th, and 10th Streets. These modifications to the street network would result in minor and generally beneficial changes to the visual character of the Plan Area. Specifically, they would reduce the amount of public space allocated to private automobiles, add street trees to shade sidewalks and soften the transition between buildings and the street, and result in smaller-scale, more pedestrian-focused streets that have greater visual interest at the street level. These changes would not be considered adverse.

Public Realm Improvements

The Specific Plan would undertake a number of public realm improvements, such as implementing the high and lower priority Green Loop and West Oakland Walk, which would create shared streets that accommodate cars, bicycles, and pedestrians; implement new paseos for locations that have been identified as priorities in downtown; fill gaps in the urban street canopy to link plazas and green areas; and include new public open space as part of the redevelopment of the Victory Court area. The new improvements would provide connections to existing parks. Active street frontages would result in smaller-scale, more pedestrian-focused streets and would create visual interest at the street level. This is expected to have a beneficial effect on visual character within the Plan Area.

Summary

Development, public realm improvements, and street network changes envisioned under the Specific Plan would be compatible with the existing built form and architectural character of the Plan Area as a whole, and compatible with the distinctive visual character of individual areas. Although the future specific designs of individual development projects are not yet known, these future projects under the Specific Plan would be analyzed to determine their individual effect on the visual character of the surrounding environment during the design review process. Future development would be required to align with and incorporate existing General Plan policies and SCAs relevant to visual quality and described in the Regulatory Setting above: SCA-AES-1: Landscape Plan (#18); SCA-AES-2: Lighting (#19); and SCA-AES-3: Underground Utilities (#85). These policies and conditions, as well as the design review process, would ensure that development within the Plan Area is consistent with applicable plans and design guidelines, is of high visual quality, and compatible with surrounding development, thus avoiding adverse impact to visual character within the Plan Area. For these reasons, adoption and development under the Specific Plan are not expected to degrade the visual character of the Plan Area. Physical changes would be incremental and would occur gradually over time as individual project sponsors find opportunities to implement their projects.

c. Analysis and Findings

(1) Light and Glare (Criterion 4)

Adoption of and development under the Specific Plan would create new sources of light or glare, but these new sources would be consistent with the existing light and glare conditions in the area. The Plan Area is already an urbanized environment with associated light and glare. Some surface parking lots and associated flood lighting would be replaced with buildings. These structures would introduce light from upper-story office and residential uses as well as ground level lighting associated with commercial use and office or residential entryways. Individual developments would not be expected to change or affect day or nighttime views as a result of increased light or glare to a significant extent. Such projects would be subject to standard project review and approval processes as required by the City of Oakland, and may require additional design review. Individual projects would be required to implement SCA-AES-2: Lighting Plan (#19), which would further minimize potential impacts resulting from lighting and ensure that lighting and glare effects remain less than significant. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to light and glare.

(2) Shadow (Criteria 5 through 9)

Impact AES-1: Shadow. Implementation of the Downtown Specific Plan and development that may occur under the Plan may result in substantial new shadow that would shade solar collectors, passive solar heaters, public open space, or historic resources, or otherwise result in inadequate provision of adequate light. (Conservatively SU)

Shade and shadow impacts occur when a structure's height or width (or a combination of these two characteristics) reduces the access to sunlight by a public open space area, solar collectors, solar heaters, or historic resources. In a built urban environment like the Plan Area, nearly all land uses create shade and shadow for neighboring structures, and in turn, are subject to shade and shadows from those same structures. Development facilitated by the Specific Plan program could include mid- and high-rise buildings that may cast shadow on public open space, solar collectors, and historic resources. While the exact details associated with future development proposals is unknown as this time, a generalized shadow analysis was prepared based on the 3D height Model. This generalized shadow study should be used as a guiding framework, but is no means intended to replace the City's review of individual development project proposals and the design review process, where potential project-level effects related to shadow would be determined according to the City's significance criteria, which considers potential adverse effects of shadow to solar collectors and similar heating facilities, public or quasi-public parks and open spaces, and historic resources. Regarding solar features in particular, the City maintains a list of locations where solar collectors are located throughout the city and issues permits for such facilities,

particularly those sited on rooftops. Individual projects will also be assessed for their proximity to historic resources and open space. If a project has potential project-level shadow effects, the City would require mitigation through the standard design review and environmental review process.

Given the sheer size of the Plan Area and amount of new development anticipated under the Plan, preparing a detailed shadow analysis was not feasible. Below is a summary of the shadow trends in the Plan Area as a result of new development.

Shadows were analyzed at 9:00 a.m., noon, and 3:00 p.m. on December 21, March 19, June 21, and September 23 which match the Summer solstice, Winter solstice, spring equinox, and fall equinox. Shadow from the new buildings would extend west in the mornings, north around the noon hour, and northeast to east in the afternoon.

Winter shadow is the longest, and thus, during the winter months, some new shadow would extend the length of a full block or more, with the highest buildings casting the greatest amount of new shadow especially during winter mornings around 9:00 a.m. and winter afternoons around 3:00 p.m. This would occur primarily near Uptown, Lake Merritt Office District, and Central Core, where existing and proposed height limits are the highest. In addition, in Jack London Square there would be more shadow on the northern most end adjacent to the I-980 and I-880 and 5th Street between Castro Street and Franklin Street as well as south of Oak Street between Fallon Street and 4th Street.

New shadow during the summer, fall, and spring months would fall within the range of winter shadow, with the majority of the new shading occurring during morning hours with shadows decreasing into the early afternoon, and afternoon hours.

Given that there are not enough sufficient details available to analyze specific shadow impacts (beyond larger trends as described above), it cannot be known with certainty that development under the Specific Plan would not cause significant shadow impacts that impairs the function of a building using passive solar collection; impairs the beneficial use of a public or quasi-public park, lawn, garden, or open space; shadows on an historic resource, or otherwise results in inadequate provision of light. Mitigation Measure AES-2 identified below is recommended; however, it is noted that even with this mitigation measure it cannot be known with certainty that impacts would be mitigated, as such the impact is conservatively SU.

Mitigation Measure AES-1: Shadow. To help ensure shadows associated with new development under the Plan are lessened, the City shall adopt a new SCA or incorporate a policy into the Specific Plan that requires project sponsors, on a project-by-project basis to complete a site-specific shadow evaluation at the time that individual projects are proposed if any of the following conditions exist:

- At or adjacent to buildings and structures that meet the definition of “historical resources” contained in Section 15064.5 of the CEQA Guidelines
- At or adjacent to a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors
- At or adjacent to a public or quasi-public park, lawn, garden or other open space

If a shadow study is required it shall address the following:

- If at or adjacent to historic building; an evaluation of how shadow would affect the building or structure which conform to the *Secretary of Interior’s Standards of Historic Properties and Guidelines for Preserving, Rehabilitation, Restoring and Reconstructing Historic Buildings (1995)*. The *Standards* require the preservation of character defining features which convey a building’s historical significance, and offers guidance about appropriate and compatible alterations to such structures. This evaluation should be carried out by a professional who meets the Secretary of the Interior’s Standards for Architectural History. The results of the evaluation shall be submitted as a Historic Architectural Assessment Report to the City of Oakland. Once the report is reviewed and approved by the City, a copy of the report should shall be submitted to the Northwest Information Center (NWIC).
- If at or adjacent to a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors an evaluation of how shadow would affect the productivity of the solar units (in terms of how much of the year solar collectors are shaded and what portion of the solar units are shaded).
- If at or adjacent to a public or quasi-public park, lawn, garden, or open space, an evaluation of how shadow would impact the beneficial use (in terms of how much of the year the public or quasi-public park, lawn, garden, open space would be shaded and what portion of the year it is shaded).

The shadow evaluation or Report (if historic building) shall be provided as part of the development approval submittal and the project sponsor shall modify the building design and placement to reduce impacts to the extent feasible. If none of the above conditions are applicable to the project, the project sponsor shall provide documentation to demonstrate such conditions do not exist.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years are conservatively deemed significant and unavoidable related to shadows. **(SU)**

(3) Wind (Criterion 10)

Impact AES-2: Wind Analysis. Implementation of the Downtown Specific Plan and development that may occur under the Plan may result in adverse wind conditions. (Conservatively SU)

Development under the Specific Plan could be tall enough to result in adverse wind conditions. Buildings taller than their surroundings tend to intercept the stronger winds at higher elevations and direct them to the ground level. This flow is called downwashing (Photo 30), and is often the main cause for wind acceleration around tall buildings at the pedestrian level. These winds can be relatively strong and turbulent, especially around the downwind building corner (Photo 31). The impact of downwashing flow at grade level is reduced by wide podium setbacks and stepped building forms (Photo 32), but in general, if podiums are taller than the surroundings, the downwashing may still impact grade level areas. Winds can also accelerate between two closely-spaced buildings and through a passage underneath a building or a bridge. Winds can also accelerate between two closely-spaced buildings (Photo 33) and through a passage underneath a building or a bridge (Photo 34). If these building/wind combinations occur for prevailing winds, there is a greater potential for increased wind activity and uncomfortable conditions.¹⁰

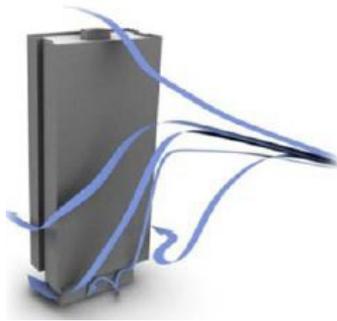


Photo 30- Downwashing

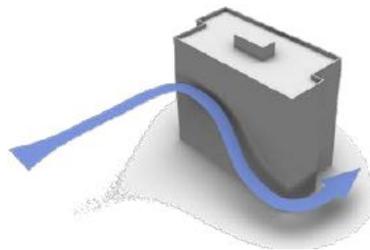


Photo 31- Corner Acceleration

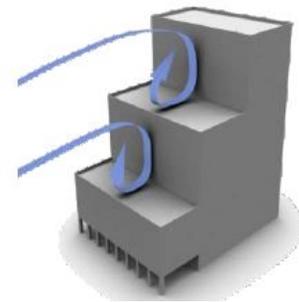


Photo 32- Stepped façade

¹⁰ RWDI, 2017. Pedestrian Level Wind Assessment – Virtualwind, RWDI Project #1702468, April 27.

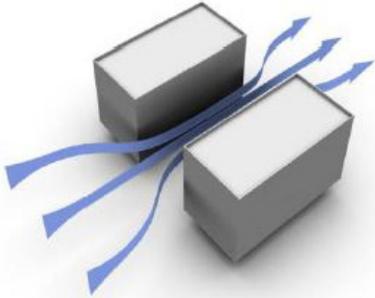


Photo 33- Channeling Flow

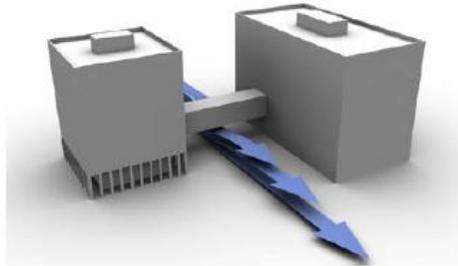


Photo 34- Underpass Acceleration

Although new high-rise structures amidst existing or other new high-rise structures can sometimes result in general reductions in wind speed and the number and durations of occurrence of wind hazard, other building characteristics (e.g., location relative to other nearby buildings and/or open spaces, façade articulation, etc.) are also considered and, together, can result in increases in adverse wind conditions as discussed directly above. Therefore, Mitigation Measure AES-1, Wind Analysis, is identified:

Mitigation Measure AES-2: Wind Analysis. Project sponsors proposing buildings 100 feet tall or taller within the entire Plan Area boundary shall conduct a detailed wind study to evaluate the effects of the project. The current definition of downtown within the CEQA Thresholds of Significance defines it as bounded by West Grand Avenue to the North, Lake Merritt and Channel Park to the east, and Oakland Estuary to the south and I-980/Brush street to the west. If the wind study determined that the project would create winds exceeding 36 miles mph for more than one hour during daylight hours during the year, the project sponsor would incorporate, if feasible, measures to reduce such effects, as necessary, until a revised wind analysis demonstrates that the proposed project would not create winds in excess of this threshold. Examples of measures that such projects may incorporate, depending on the site-specific conditions, include structural and landscape design features and modified tower designs: wind protective structures or other apparatus to redirect downwash winds from tall buildings, tree plantings or dense bamboo plantings, arbors, canopies, lattice fencing, etc. It is also noted that the City's threshold is very stringent. The City may modify this threshold in the future and if it does, it would be applicable to the Specific Plan Area; however, it is possible that a significant and unavoidable impact may still occur. At this time, however, there are not sufficient details available to analyze specific impacts and it cannot be known with certainty that a project redesign would eliminate the potential for new adverse wind impacts. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be conservatively deemed significant and unavoidable related to wind. (SU)

d. Cumulative Aesthetics Impacts

The cumulative geographic context includes the Plan Area, viewsheds visible within and across the Plan Area, and surrounding areas potentially shaded by adoption and development under the Specific Plan and other development within the Plan Area vicinity including development under the Specific Plans for the adjacent areas.

Scenic Vistas and Resources, Visual Character and Light and Glare (Criteria 1 through 4) Geographic Context

As discussed above, under CEQA Section 21099(d), aesthetic impacts of a residential, mixed-use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment. This also applies to cumulative impacts. Accordingly, adoption of the Specific Plan and its associated development when combined with other cumulative development in and around the Plan Area would not result in or contribute to any cumulatively significant aesthetic impacts.

Further, any cumulative effects would be minimized due to past, present, and future developments' adherence to the General Plan and Specific Plan policies and SCAs described earlier in this Setting section, as well as compliance with conditions identified through the City's design review processes, when applicable.

(2) Shadow and Wind (Criteria 5 through 10)

As noted above, due to the uncertainty of available mitigation, adoption of and development under the Specific Plan could result in significant and unavoidable impacts related to shadows and wind. Therefore, when combined with other cumulative development in and around the Plan Area, adoption of the Plan and its associated development could contribute to cumulatively significant shade, and shadow, and result in or contribute to cumulative significant shadow and wind impacts.

Cumulative Impact AES-1: Implementation of the Downtown Specific Plan and development that may occur under the Plan may, in combination with other past, present, and reasonably foreseeable future projects within and around the Plan Area would result in significant cumulative wind and shadow impacts. (Conservatively SU)

Mitigation Measure Cumulative AES-1: Implement Mitigation Measures AES-1 and AES-2. (SU)

G. BIOLOGICAL RESOURCES

This section describes the biological resources present or potentially present in the Downtown Oakland Specific Plan Area and vicinity and discusses potential impacts to these resources that could result from implementation of the Specific Plan and its associated development. Existing City policies and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified.

1. Setting

This section provides a summary of biological resources in the Plan Area and its vicinity. Biological resources were identified through a literature review of existing information. The review provided information on the biological resources in the area, the extent of known sensitive natural communities and jurisdictional waters, and the distribution and habitat requirements of special-status species that have been reported from or are considered to have some likelihood to occur in the project vicinity. The Plan Area is located in Downtown Oakland, bordered by the notable natural landmarks of Lake Merritt and the Lake Merritt Channel to the east, Glen Echo Creek to the north, and the northern shore of the Oakland Estuary to the south. Predominant land uses in the area include a mix of residential, industrial, commercial, mixed-use, recreational, and public right-of-way. The Plan Area is situated across three watersheds: West Oakland Watershed, Glen Echo Creek Watershed, and the Oakland Estuary Watershed. Despite the highly urbanized nature of the Plan Area, natural habitat for native species such as migratory birds and fish remain in the adjacent water bodies and aquatic habitats. Native and non-native wildlife adapted to urban environments continue to utilize the structures, street trees, and limited landscaping in the Plan Area. The Specific Plan policies and City Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified. No additional mitigation measures were determined necessary.

a. Habitat Types within the Plan Area

(1) Urban

The majority of the Plan Area is developed and characterized by urban land uses. Developed urban areas provide little to no habitat for most native wildlife and plants due to the conversion of natural habitat to roads and buildings, with only limited areas of vegetative cover in parks and landscape plantings. Wildlife species found in urban areas are tolerant of ongoing disturbances and human presence and are often considered pests capable of utilizing limited food sources. Urban wildlife species in the Oakland area include the common raven (*Corvus corax*), crow (*Corvus corone*), northern mockingbird (*Mimus polyglottos*), raccoon (*Procyon lotor*), Norway rat (*Rattus norvegicus*), house mouse (*Mus musculus*), and Virginia opossum (*Didelphis virginiana*). A number of native raptors continue to forage and occasionally nest in the vicinity of the Plan Area,

including red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperi*), peregrine falcon (*Falco peregrinus anatum*), and black-crowned night heron (*Nycticorax nycticorax*).

Landscaped

The Plan Area contains various landscaped spaces such as parks, other recreational facilities, and greenways that serve as habitat for certain animal and plant species. Landscaped areas can provide cover, foraging, and nesting habitat for bird species that have adapted to urban environments and are tolerant of disturbances and human presence. Parks within the Plan Area include Lincoln Park and Recreation Center, Lafayette Park, Jefferson Park, Malonga Casquelord-Peralta Park, Harrison Square, Frank Ogawa Plaza, Uptown Park, and Estuary Park and Jack London Aquatic Center. Greenway buffers are also present at the borders of Lake Merritt, the Lake Merritt Channel, Snow Park, Madison Park, and the Oakland Estuary.

Bird species commonly found in these landscaped spaces include the house finch (*Carpodacus mexicanus*), dark-eyed junco (*Junco Hyemalis*), English sparrow (*Passer domesticus*), western scrub jay (*Aphelocoma californica*), and Anna's hummingbird (*Calypte anna*). Tree species commonly found in the parks and landscaping within the Plan Area include coast redwood (*Sequoia sempervirens*), London planetree (*Platanus x acerifolia*), Australian tea tree (*Leptospermum laevigatum*), southern magnolia (*Magnolia grandiflora*), deodar cedar (*Cedrus deodara*), Monterey pine (*Pinus radiata*), eucalyptus (*Eucalyptus* sp.), and native coast live oak (*Quercus garifolia*).

(2) Wetlands and Aquatic Habitat

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level because of their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and their water recharge, filtration, and purification functions.

Lake Merritt, the Lake Merritt Channel, the Oakland Estuary, and Glen Echo Creek are aquatic habitats that border the Plan Area. Narrow bands of wetlands occur in some locations along the margins of these features, but most of the regulated waters are unvegetated aquatic habitats.

Under the National Wetland Inventory of the U.S. Fish and Wildlife Service (USFWS), Lake Merritt is mapped as part of the Lacustrine System (permanently flooded brackish lake with unconsolidated bottom); the Lake Merritt Channel and the Oakland Estuary are mapped as

estuarine and marine deep water habitat; and the daylighted portions of Glen Echo Creek are mapped as riverine habitat.¹

Lake Merritt

Lake Merritt is a large lake located adjacent to the Plan Area's northeastern boundary. It was originally a tidal lagoon and continues to receive muted tidal flows from the Oakland Estuary through the Lake Merritt Channel. The circumference of the lake measures 3.4 miles and covers approximately 155 acres of land.² The lake receives freshwater from five creeks (including Glen Echo Creek), smaller streams, and 62 storm drains that carry rainwater from the Oakland hills and other neighborhoods. The depth and saline content of Lake Merritt fluctuates throughout the year depending on the volume of freshwater that enters the lake. Lake Merritt serves as one of many stopovers along the Pacific Flyway for migratory birds and contains five manmade bird islands that provide roosting and nesting habitat for egrets, herons, Canada geese, and other bird species. Lake Merritt was designated in 1870 as the first wildlife refuge in the United States.

Oakland Estuary

The Oakland Estuary is a strait between the island of Alameda and the Plan Area's southern border, stretching from the Port of Oakland on the west to Fruitvale Bridge on the east.³ The estuary separates the cities of Oakland and Alameda, and connects the San Francisco Bay to the west and the San Leandro Bay to the east. Three of the Port of Oakland shipping terminals are located along the west end of the estuary. The Oakland Estuary is the eventual drainage destination of the 5.6-square-mile Oakland Estuary Watershed, encompassing most of the Plan Area. The estuary is a U.S. Environmental Protection Agency (EPA) designated impaired water body due to high levels of polychlorinated biphenyl, mercury lead, and pesticides.⁴

Although parts of the Oakland Estuary were historically comprised of tidal marshlands and mudflats, most have been eliminated over time by filling and dredging activities. Where marshland vegetation remains along the margins of the estuary, it consists of native species such as pickleweed (*Salicornia virginica*), saltgrass (*Distichlis spicata*), marsh gumplant (*Grindelia stricta* var. *angustifolia*), and alkali heath (*Frankenia salina*). The shorelines provide substrate for aquatic vegetation such as brown alga (*Porphyra* sp.), red alga (*Fauchea* sp.), and sea lettuce (*Ulva* sp.)

¹ U.S. Fish and Wildlife Service (USFWS), 2018. National Wetlands Inventory – Surface Waters and Wetlands. Available at: <https://www.fws.gov/wetlands/data/Mapper.html>, accessed February 26, 2019.

² City of Oakland, 2019. Lake Merritt. Available at: <http://www2.oaklandnet.com/government/o/opr/s/LakeMerritt/index.htm>, accessed January 29, 2019.

³ Alameda County Flood Control & Water Conservation District (ACFCWCD), 2019. Oakland Estuary Watershed. Available at: <https://www.acfloodcontrol.org/resources/explore-watersheds/oakland-estuary-watershed/>, accessed March 9, 2019.

⁴ Ibid.

that can be found covering pilings and breakwater structures. The Oakland waterfront adjacent to the estuary is now mostly developed with industrial and commercial uses.

The aquatic habitat of the Oakland Estuary continues to support a diversity of birds and aquatic life. The open waters provide foraging and resting opportunities for a variety of bird species including gulls, ducks, and shorebirds. The open waters provide dispersal and foraging opportunities for estuarine and marine fish and other aquatic life. Common fish species found in this area include prickly sculpin (*Cottus asper*), striped bass (*Morone saxatilis*), California bat ray (*Myliobatis californica*), and surfperches. At low tides, invertebrate populations in exposed mudflats provide important foraging opportunities for resident and migratory shorebirds and waterfowl. Common water and shorebird species found along the Oakland Estuary include mallard duck (*Anas platyrhynchos*), California gull (*Larus californicus*), brown pelican (*Pelecanus occidentalis*), western grebe (*Aechmophorus occidentalis*), cormorants, black-crowned night heron (*Nycticorax nycticorax*), and egrets. The rock shoreline harbors small shore crabs and isopods and the intertidal and sub-tidal zone supports native oyster, numerous clams and mussels such as bay mussel (*Mytilus trossulus*), blue mussel (*Mytilus galloprovincialis*), and Asian mussel (*Musculista senhousia*), barnacle (*Amphibalanus amphitrite*), and white acorn barnacle (*Balanus glandula*).

Lake Merritt Channel

The Lake Merritt Channel is an approximately 100-foot-wide, free-flowing, narrow waterway that connects Lake Merritt to the Oakland Estuary and San Francisco Bay.⁵ This hydrologic connection is seen as important for the health of Lake Merritt, and allows for movement of fish and other aquatic life between the lake and estuary. Restoration of some reaches of the channel margins with saltmarsh vegetation has occurred as part of Measure DD implementation, supporting a cover of pickleweed, saltgrass, marsh gumplant, and other native marsh species. The upper margins of the Lake Merritt Channel have been landscaped with areas of irrigated, non-native turf, and a mixture of native and non-native trees and shrubs. Several dense patches of invasive blackberry (*Rubus* sp.), sweet fennel (*Foeniculum vulgare*), and pampas grass (*Cortaderia selloana*) are present along the shoreline of the Lake Merritt Channel, south of 12th Street. Landscaped areas and trees can provide cover, foraging, and nesting habitat for a variety of bird species, especially those that are tolerant of disturbance and human presence found in urban areas.

Glen Echo Creek

Glen Echo Creek, also known as Cemetery Creek, flows north of the Plan Area, originating in the Oakland hills near Upper Rockridge and Piedmont Avenue before draining into the western arm

⁵ City of Oakland, 2019. Creeks, Watershed, & Stormwater. Available at: <http://www2.oaklandnet.com/government/o/PWA/o/FE/s/ID/CandW>, accessed February 26, 2019.

of Lake Merritt.⁶ Glen Echo Creek passes through residential and commercial areas, and alternates between daylighted and culverted sections. The northern daylighted portions of Glen Echo Creek support native and non-native species such as oaks, redwood, willows (*Salix* spp.), California buckeye (*Aesculus californica*), and elms (*Ulmus* sp.). In segments with mature trees, the riparian vegetation may support nesting birds and other wildlife, such as raccoon, opossum, Norway rat, as well as native birds of prey such as Cooper's hawk and sharp-shinned hawk (*Accipiter striatus*).

b. Sensitive Natural Communities

Sensitive natural communities are natural community types considered by the California Department of Fish and Wildlife (CDFW) to have a high inventory priority because of their rarity and vulnerability to disturbance and loss. Although sensitive natural communities have no legal protective status under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA), they are provided some level of consideration under CEQA. The level of significance of a project's impact on any particular sensitive natural community depends on that natural community's relative abundance and rarity.

Natural communities are ranked based on rarity and threat with the Vegetation Classification and Mapping Program tool of the Biogeographic Data Branch of the CDFW.⁷ Based on records maintained by the California Natural Diversity Data Base (CNDDDB) of the CDFW, no well-developed occurrences of sensitive natural communities have been reported from the Plan Area. However, small, unmapped areas of saltmarsh, brackish marsh, and freshwater marsh and riparian habitats occur in some locations along the margins of Lake Merritt, the Lake Merritt Channel, the shoreline of the Oakland Estuary, and unchannelized reaches of Glenn Echo Creek.

c. Jurisdictional Waters and Wetlands

As described above, jurisdictional waters associated with Lake Merritt, the Lake Merritt Channel, the Oakland Estuary, and unchannelized reaches of Glenn Echo Creek are regulated waters which border the Plan Area. These consist largely of unvegetated other waters, although some wetland cover occurs along some of the shoreline to these features. A further description of the State and federal regulations pertaining to jurisdictional waters is provided below in Regulatory Setting.

⁶ Alameda County Flood Control & Water Conservation District (ACFCWCD), 2019. Glen Echo Creek Watershed. Available at: <https://www.acfloodcontrol.org/resources/explore-watersheds/glen-echo-creek-watershed/>, accessed February 26, 2019.

⁷ California Department of Fish and Wildlife (CDFW), 2018. Natural Communities – Biogeographic Data Branch. Available at: <https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities>, accessed February 26, 2019.

d. Special-Status Species

Special-status species are plants and animals that are legally protected under the State and/or Federal Endangered Species Acts or other regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Listed species often represent constraints to development when proposed development would result in “take” of these species.⁸ A number of species known to occur in the project vicinity are protected pursuant to federal and/or State of California endangered species laws, or have been designated Species of Special Concern by CDFW. For the purposes of this Draft EIR, special-status species include:

- Plant and wildlife species listed as rare, threatened, or endangered under the federal or State endangered species acts;
- Species that are candidates for listing under either federal or State law;
- Species formerly designated by the USFWS as Species of Concern or designated by CDFW as a California Species of Special Concern (SSC);
- Species protected by the federal Migratory Bird Treaty Act (16. U.S.C. 703-711) and provisions in the California Fish and Game Code; and/or
- Species such as candidate species that may be considered rare or endangered pursuant to Section 15380(b) of the CEQA Guidelines.

A number of special-status species are known to occur or have the potential to occur in the Plan Area or larger Oakland vicinity. Data on the known distribution of special-status species is available from the CNDDDB of the CDFW, the California Native Plant Society (CNPS) Electronic Inventory of rare and endangered vascular plants and in California (Inventory), and species lists prepared by the USFWS as part of their Information for Planning and Consultation program. Based on review of the biological literature of the region, information presented in previous environmental documentation, and an evaluation of the habitat conditions, a determination was then made on the potential for presence of a particular species to occur in the Plan Area. Many of these species compiled as part of the background review were eliminated from further evaluation because (1) the Plan Area does not and/or never has provided suitable habitat for the species, or (2) the known range for a particular species is outside of the Plan Area.

⁸ “Take” as defined by FESA means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect” a threatened or endangered species. “Harm” is further defined by USFWS to include killing or harming of wildlife by significant obstruction of essential behavior patterns (i.e., breeding, feeding, or sheltering) through significant habitat modification or degradation. CDFW also considers the loss of listed species’ habitat as take.

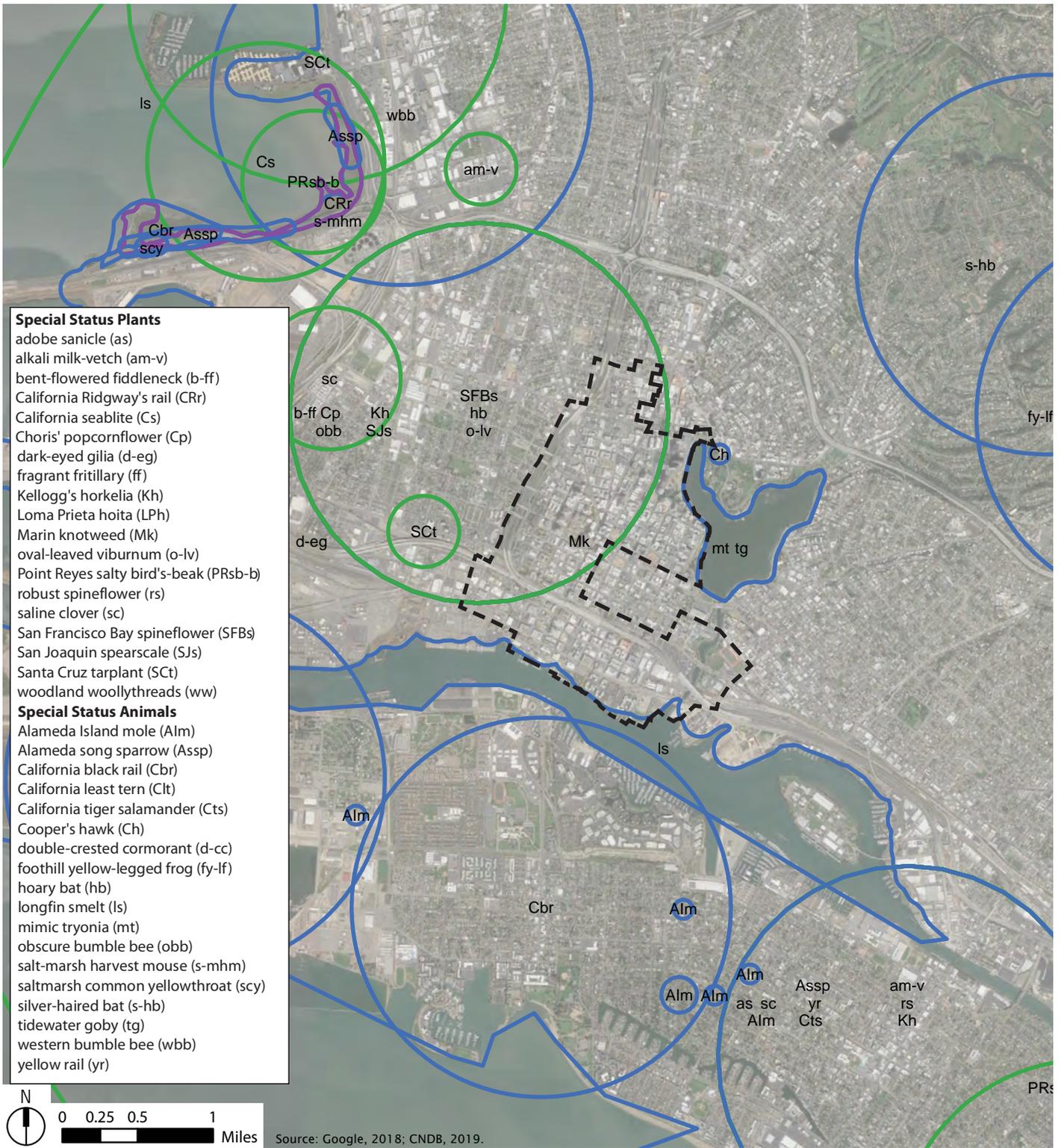
Figure V.G-1 shows the distribution of special-status species according to records maintained by the CNDDDB, including occurrences of 19 special-status plant species and 18 special-status animal species. The large, generalized occurrences of numerous special-status species that extend over much of the Plan Area are all from historic occurrences reported from "Oakland" that date from 1883 to 1952. No suitable habitat for any of these special-status plant species remains in the Plan Area, and all are presumed extirpated by the CNDDDB, as summarized further below. Suitable habitat for numerous special-status animal species remains in the natural habitats that border the Plan Area, including the aquatic habitat of the Oakland Estuary and Lake Merritt, as discussed further below.

Table V.G-1 contains a list of 21 special-status animal species documented as occurring within the Plan Area or for which potential habitat is present, including species not routinely monitored by the CNDDDB. This table includes a ranking for the likelihood of presence within the Plan Area. Species for which potentially suitable habitat is considered present within the Plan Area but are nonetheless determined to have a low potential to be present are also listed in Table V.G-1. Species observed or with a moderate to high potential of occurrence in the Plan Area are discussed in further detail below.

(1) Special-Status Animals

Twenty-one special-status species were identified in Table V.G-1 as having potential for occurrence within the Plan Area. Of the species listed in Table V.G-1, eleven were identified as having a moderate to high potential of occurrence within the Plan Area. As a result, the following species are evaluated in the impact analysis and described in further detail below.

- Peregrine falcon
- California brown pelican
- Cooper's hawk
- Red-shouldered hawk
- Red-tailed hawk
- Double-crested cormorant
- Alameda song sparrow
- Pallid bat
- Silver-haired bat
- Hoary bat
- Big free-tailed bat



Downtown Oakland Specific Plan EIR

Figure V.G-1
Special-Status Species and Sensitive Natural Communities

TABLE V.G-1 SPECIAL STATUS PLANT AND WILDLIFE SPECIES THAT MAY OCCUR, OR ARE KNOWN TO OCCUR IN HABITATS SIMILAR TO THOSE FOUND IN THE PLAN AREA

Species	Status (Fed/State)	Habitat Requirements	Habitat Suitability of Project Area
Mammals			
Hoary Bat <i>Lasiurus cinereus</i>	-/WBWG:M	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.	Moderate to High. Suitable roosting habitat occurs within the parks within the Plan Area and foraging habitat is present over park turfgrass and Lake Merritt. May forage and roost but not expected to breed within Plan Area.
Big free-tailed Bat <i>Nyctinomops macrotis</i>	--/SSC, WBWG:MH	Roosts primarily in trees, less often in shrubs. Roost sites often are in edge habitats adjacent to streams, fields, or urban areas.	Moderate to High. Suitable roosting habitat occurs within the parks within the Plan Area and foraging habitat is present over park turfgrass and Lake Merritt. May forage and roost but not expected to breed within Plan Area.
Pallid Bat <i>Antrozous pallidus</i>	--/SSC, WBWG:H	Roosts found in rock outcrops, caverns, hollow trees, buildings, and bridges.	Moderate to High. Suitable roosting habitat occurs within the parks within the Plan Area and foraging habitat is present over park turfgrass and Lake Merritt. May forage and roost but not expected to breed within Plan Area.
Silver-haired Bat <i>Lasionycteris noctivagans</i>	--/WBWG:M	Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark. Females may form nursery colonies or occur as solitary individuals in dense foliage or hollow trees.	Moderate to High. Suitable roosting habitat occurs within the parks within the Plan Area and foraging habitat is present over park turfgrass and Lake Merritt. May forage and roost but not expected to breed within Plan Area.
Birds			
Cooper's hawk <i>Accipiter cooperii</i>	--/CWL	Commonly nests in conifers and riparian woodland but also known to nest in large trees in urban areas throughout East Bay, especially near riparian corridors.	High. Known to nest within Lakeside Park, which is adjacent to Plan Area. May forage or nest within Plan Area.
Alameda song sparrow <i>Melospiza melodia pusillula</i>	--/SSC	Tidal salt marshes dominated by pickleweed; nests primarily in pickleweed (<i>Salicornia</i> sp.) and marsh gumplant (<i>Grindelia stricta</i>).	High. Observed at the Lake Merritt Channel; marginal nesting habitat along Channel.
Barrow's goldeneye <i>Bucephala islandica</i>	--/SSC	Lagoons, brackish lakes, and bays of central-northern California	Low. Regularly observed at Lake Merritt and the Lake Merritt Channel in late fall/early winter but roosting and nesting habitat absent in Plan Area.

TABLE V.G-1 SPECIAL STATUS PLANT AND WILDLIFE SPECIES THAT MAY OCCUR, OR ARE KNOWN TO OCCUR IN HABITATS SIMILAR TO THOSE FOUND IN THE PLAN AREA

Species	Status (Fed/State)	Habitat Requirements	Habitat Suitability of Project Area
Red-shouldered hawk <i>Buteo lineatus</i>	-/CDFW Code 3503.5	Commonly nests in riparian corridors but becoming increasingly common in urban areas throughout the East Bay, nesting in large trees.	High. Fairly common locally in urban areas. May nest within wooded areas of Peralta Park or other parks in Plan Area.
Red-tailed hawk <i>Buteo jamaicensis</i>	-/CDFW Code 3503.5	Nests in large oaks and conifers. Bay Area's most common urban raptor.	High. Known to occur in Downtown Oakland. May nest within tall trees in the various parks within Plan Area.
Northern harrier <i>Circus cyaneus</i>	-/SSC	Nests on ground primarily in emergent vegetation, wet meadows, or near rivers and lakes, but may nest in grasslands away from water.	Low. May occasionally forage in open areas along shorelines but no suitable nesting habitat present within Plan Area.
Double-crested cormorant <i>Phalacrocorax auritus</i>	-/CDFW WL	Nests along coast on isolated islands or in trees along shoreline margins.	High. Known to forage and roost at Lake Merritt. Suitable roosting and nesting habitat present within trees adjacent to Lake Merritt, but absent in Plan Area.
Peregrine Falcon <i>Falco peregrinus anatum</i>	Delisted/Delisted, CFP, BCC	Forages in many habitats; requires cliffs for nesting.	High. This species has been observed foraging and roosting at multiple sites within Downtown Oakland. However, there are no known nesting sites for this species in Oakland. Tall buildings within Plan Area provide potentially suitable nesting habitat.
California brown pelican <i>Pelecanus occidentalis californicus</i>	Delisted /Delisted. CFP	Nests on islands, seeks cover on islands, mudflats, beaches, wharves.	High. Known to forage and roost on Lake Merritt. Inner Harbor contains suitable foraging and roosting habitat. Suitable nesting habitat absent from Plan Area.
Salt marsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	--/SSC	Salt, brackish, and freshwater marshes and riparian woodlands; nests on or near ground in low vegetation.	Low. Only small patches of marginal habitat present in marshlands along open waters; unlikely to nest in Plan Area.
Fish			
Tidewater goby <i>Eucyclogobius newberryi</i>	FE/SSC	Brackish water lagoons and estuaries	Low. Reported as present in Lake Merritt in late 1990s. ^a Thought to be extirpated because of water quality degradation. ^b No suitable breeding habitat within Plan Area

TABLE V.G-1 SPECIAL STATUS PLANT AND WILDLIFE SPECIES THAT MAY OCCUR, OR ARE KNOWN TO OCCUR IN HABITATS SIMILAR TO THOSE FOUND IN THE PLAN AREA

Species	Status (Fed/State)	Habitat Requirements	Habitat Suitability of Project Area
Chinook salmon (Sacramento River winter run ESU) <i>Oncorhynchus tshawtscha</i> pop. 7	FE/SE	Open water of Bay and Delta, tributary rivers and streams	Low. Migrates through San Francisco Estuary and individuals may occasionally stray into the Oakland Estuary and Lake Merritt. No suitable breeding habitat within Plan Area.
Chinook salmon (Central Valley spring-run ESU) <i>Oncorhynchus tshawtscha</i> pop. 6	FT/ST	Open water of Bay and Delta, tributary rivers and streams	Low. Migrates through San Francisco Estuary and individuals may occasionally stray into the Oakland Estuary and Lake Merritt. No suitable breeding habitat within Plan Area.
Chinook salmon (Central Valley fall/late fall run ESU) <i>Oncorhynchus tshawtscha</i> pop. 13	--/SSC	Open water of Bay and Delta, tributary rivers and streams	Low. Migrates through San Francisco Estuary and individuals may occasionally stray into the Oakland Estuary and Lake Merritt. No suitable breeding habitat within Plan Area.
Steelhead (Central California Coast DPS) <i>Oncorhynchus mykiss irideus</i> pop. 8	FT/--	Open water of Bay and Delta, tributary rivers and streams	Low. Migrates through San Francisco Estuary and individuals may occasionally stray into the Oakland Estuary and Lake Merritt. No suitable breeding habitat within Plan Area.
Longfin smelt <i>Spirinchus thaleichthys</i>	FC/ST, SSC	Open water of Bay and Delta, tributary rivers and streams	Low. Migrates through San Francisco Estuary and individuals may occasionally stray into the Oakland Estuary and Lake Merritt. No suitable breeding habitat within Plan Area.
Invertebrates			
Mimic tryonia (California brackishwater snail) <i>Tryonia imitator</i>	--/--	Inhabits permanently submerged areas in coastal lagoons, estuaries, and salt marshes, from Sonoma County south to San Diego County	Low. Historical collection from vicinity of Lake Merritt (collection date uncertain but before 1951). This species is presumed extirpated from Lake Merritt, ^c and no suitable breeding habitat within Plan Area.

TABLE V.G-1 SPECIAL STATUS PLANT AND WILDLIFE SPECIES THAT MAY OCCUR, OR ARE KNOWN TO OCCUR IN HABITATS SIMILAR TO THOSE FOUND IN THE PLAN AREA

Species	Status (Fed/State)	Habitat Requirements	Habitat Suitability of Project Area
Note: ESU = Evolutionary Significant Unit; DPS = Distinct Population Segment			
<u>Status Codes</u>			
FE	Federally Endangered	SE	State Endangered
FT	Federally Threatened	ST	State Threatened
FD	Federally Delisted	CFP	California Fully Protected Species
BCC	USFWS Bird of Conservation Concern	SSC	California Species of Special Concern
CBR	Considered for Listing but Rejected	CWL	CDFW Watch List
WBWG:H Western Bat Working Group - High Priority			
WBWG:M Western Bat Working Group - Medium Priority			
WBWG:MH Western Bat Working Group - Medium-High Priority			
^a California Natural Diversity Database (CNNDDB), 2019.			
^b City of Oakland, 2006.			
^c California Department of Fish and Wildlife (CDFW), 2018. Natural Communities - Biogeographic Data Branch. Available at: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities , accessed February 26, 2019.			
Source: List compiled from CNDDDB (CDFW, 2019), USFWS Species List for Plan Area (USFWS, 2019), and EIRs for the Oakland vicinity.			

Birds

Peregrine falcon (*Falco peregrinus anatum*). The peregrine falcon is a federal and State-Delisted Endangered Species and a California Fully Protected Species.⁹ It is known throughout California and is a year-around resident along the Pacific coast. The peregrine is a specialist, preying primarily on mid-sized birds such as pigeons, doves, and ducks in flight. Occasionally they will forage on insects and bats. Although typical nesting sites for this species are tall cliffs, preferably over or near water, peregrines are also known to use urban structures, including the Bay Bridge and tall buildings in San Francisco and San Jose. Nesting peregrines were also documented from the Fruitvale Avenue Bridge on the Oakland-Alameda border, approximately three miles southeast of the Plan Area; one breeding pair was observed at this location in 2010.¹⁰ No peregrine nests are documented in Downtown Oakland but the species has been observed perching and roosting on several buildings in Downtown Oakland including Kaiser Center, Oakland City Hall, and the California State building.¹¹ Many of the tall buildings and structures within the Plan Area provide roosting and potential nesting habitat for this species. The abundance of prey and suitable perching habitat provide highly suitable habitat for peregrine falcons.

Brown pelican (*Pelecanus occidentalis*). The brown pelican is a federal and State-Delisted Endangered Species and a California Fully Protected Species. It is a regular summer and fall migrant to San Francisco Bay and in some years these birds can be found in the Bay year-round. These species are colonial breeders that favor rocky islands along the southern California coast to Mexico and, historically, only rarely north as far as Point Lobos. Brown pelicans have been observed foraging and roosting at Lake Merritt. Although they are not expected to nest within the Plan Area or vicinity they may roost on piers or pilings, forage in Lake Merritt and the Oakland Estuary, and fly over the Plan Area in accessing open water habitat.

Cooper's hawk (*Accipiter cooperi*). Cooper's hawks are protected under Section 3503.5 of CDFW code (nesting Falconiformes). Cooper's hawks range over most of North America and may be seen throughout California, most commonly as a winter migrant. Nesting pairs have declined throughout the lower-elevation, more populated parts of the state. Cooper's hawks forage in open woodlands and wooded margins and nests in tall trees, often in riparian areas. A pair of nesting Cooper's hawks were also documented in Lakeside Park, adjacent to and northeast of the

⁹ The peregrine falcon was listed as federally endangered on June 2, 1970, and then federally delisted on August 25, 1999. This species was also listed as State endangered on June 27, 1971, and then State-delisted on November 4, 2009.

¹⁰ Nevill, G., 2010. Nesting Peregrines on Fruitvale Avenue Bridge, Alameda (4/24/10), annotated photographs. Available at: http://www.raptor-gallery.com/2010_04_24PM/indec.htm, accessed March 14, 2019.

¹¹ Nevill, G., 2007. Saturday in Oakland, Falcon Hunting, July 14, 2007. Annotated photographs, Available at: <http://raptor-gallery.com/PD07/07-14-07/index.htm>, accessed March 14, 2019.

project boundary, in 2003 (see Figure V.G-1). This species may forage or nest within Peralta Park or other parks within the Plan Area with dense trees.

Red-tailed hawk (*Buteo jamaicensis*). Red-tailed hawks are protected under Section 3503.5 of CDFW code (nesting Falconiformes). They are commonly found in woodlands and open country with scattered trees. These large hawks feed primarily on small mammals, but will also prey on other small vertebrates, such as snakes and lizards, as well as on small birds and invertebrates. Red-tailed hawks nest in a variety of trees in urban, woodland, and agricultural habitats. Large trees located within parks such as Peralta Park potentially provide suitable nesting habitat for red-tailed hawks.

Red-shouldered hawk (*Buteo lineatus*). Red-shouldered hawks are protected under Section 3503.5 of CDFW code (nesting Falconiformes). They are relatively common in both rural and urban areas and can be found in residential neighborhoods and along riparian corridors or other waterbodies. These hawks hunt primarily for mammals, reptiles, and amphibians. Large trees within the Plan Area, particularly those within parks, provide potential nesting habitat for red-shouldered hawks.

Double-crested cormorant (*Phalacrocorax auritus*). Roosting colonies of the double-crested cormorant are currently maintained on the CDFW Watch List. This species is the only one of the three cormorants occurring in California that utilize freshwater and is the most common cormorant in San Francisco Bay. The species feeds on a variety of fish and some crustaceans. They are colonial breeders, building stick nests or platforms in trees inland and using rocky ledges along the coast. Double-crested cormorants nest locally on the Richmond-San Rafael Bridge, at Lake Merced in San Francisco, and at other locations around San Francisco Bay. Since work on the Richmond-San Rafael and Carquinez bridges commenced, this species developed a nesting colony on the Lake Merritt Bird Islands and forages at Lake Merritt, and individuals frequently fly over the Plan Area when moving between open water foraging habitats.

Alameda song sparrow (*Melospiza melodia pusillula*) was once an abundant species found throughout the salt marshes of San Francisco Bay. It is now confined to tidal salt marsh habitat located on the fringes of the south arm of San Francisco Bay east to El Cerrito, south to Alviso, and west to San Francisco. Vegetation is required for nesting, song perches, and concealment from predators. The dominant plants of tidal salt marshes in San Francisco Bay are cord grass (*Spartina* spp.) in low elevations of the marsh, pickleweed on slightly higher ground, and gumplant even higher along slough edges. Alameda song sparrows require some upper marsh vegetation for nesting, so that nests remain dry during all but the highest tides. This species has been observed along the Lake Merritt Channel, and may forage along the shoreline of Lake Merritt and the Oakland Estuary along the edge of the Plan Area where suitable marsh vegetation is present.

Mammals

Pallid bat (*Antrozous pallidus*) ranges throughout western North America, from British Columbia to Mexico and east to Texas. This species is most abundant in arid lands, including deserts and canyon lands, shrub-steppe grasslands, and higher elevation coniferous forests and is therefore only likely to occur within the Plan Area on a transient basis during spring and summer migrations. Pallid bats may roost alone or in groups, typically occupying cavities or exfoliating bark of trees, and man-made structures such as bridges and abandoned or infrequently used buildings. Pallid bats forage over open areas and are opportunistic feeders on a wide variety of insects, foraging both on surfaces and in the air. Prey includes beetles, centipedes, crickets, moths, and rarely, lizards and small rodents. This species may occur within the Plan Area as a seasonal migrant, foraging in open parklands during migratory periods, but is not expected to breed and reproduce within the Plan Area.

Silver-haired bat (*Lasiorycteris noctivagans*) occurs throughout most of North America and is primarily associated with conifer and mixed conifer/hardwood forests. This species would most likely be found in the Project Area during winter and seasonal migrations. Silver-haired bats roost almost exclusively in cavities and under the bark of tree, although they are sometimes found in structures as well. Moths are apparently the primary prey for this species, although they have been documented as feeding on a wide variety of insects. Seasonal records suggest considerable north to south migration, with animals moving to warmer, more southern climates in the winter.¹² This species may occur within the Plan Area as a seasonal migrant, foraging in open parklands during migratory periods, but is not expected to breed and reproduce within the Plan Area.

Hoary bat (*Lasiurus cinereus*) is the most widespread of all North American bats. This species ranges from Canada to South America and is primarily associated with forested habitats. Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees, often at the edge of a clearing. The species is highly migratory, but neither wintering sites nor migratory routes are well documented. Hoary bats reportedly have a strong preference for moths, but are also known to eat beetles, flies, grasshoppers, termites, dragonflies, and wasps.¹³ This species may occur within the Plan Area as a seasonal migrant, foraging in open parklands during migratory periods, but are not expected to breed and reproduce within the Plan Area.

Big free-tailed bat (*Nyctinomops macrotis*) ranges from South America to the southwestern United States. This species is found in a variety of habitats including desert shrub, woodlands,

¹² Western Bat Working Group (WBWG), 2005a, Species account for silver-haired bat. Available at: <http://wbwg.org/western-bat-species/>, accessed March 14, 2019.

¹³ Western Bat Working Group (WBWG), 2005b, Species account for hoary bat. Available at: <http://wbwg.org/western-bat-species/>, accessed March 14, 2019.

and evergreen forests. It mostly roosts in cliff crevices, but has been documented in buildings, caves, and tree cavities. This species may occur within the Plan Area as a seasonal migrant. It may seasonally utilize trees or abandoned buildings for roosting, foraging in open parklands, but is not expected to breed and reproduce within the Plan Area.

(2) Special-Status Plants

Numerous special-status plants have been reported from the Oakland vicinity, but none are expected to currently occur within the Plan Area. These special-status plant species occur in valley and foothill grasslands, forests, marshes, vernal pools, or scrub communities that are no longer found within the Plan Area. There are no intact native communities remaining within the Plan Area and therefore, no suitable habitat for these species is present. Special-status plant species which were historically reported from the Oakland vicinity, including those indicated in Figure V.G-1, would have been extirpated from the Plan Area long ago due to the conversion of natural habitat to urban development.

2. Regulatory Setting

a. Federal

(1) Federal Endangered Species Act

The USFWS and National Oceanic and Atmospheric Administration, National Marine Fisheries Service are responsible for implementation of the FESA. The act protects fish and wildlife species that are listed as threatened or endangered, and their habitats. "Endangered" species, subspecies, or distinct population segments are those that are in danger of extinction throughout all or a significant portion of their range, and "threatened" species, subspecies, or distinct population segments are likely to become endangered in the near future.

Section 9 of the FESA prohibits the "take" of any fish or wildlife species listed as endangered, including the destruction of habitat that prevents the species' recovery. "Take" is defined as an action or attempt to hunt, harm, harass, pursue, shoot, wound, capture, kill, trap, or collect a species. Section 9 prohibitions also apply to threatened species unless a special rule has been defined with regard to take at the time of listing. Under Section 9 of the FESA, the take prohibition applies only to wildlife and fish species.

The USFWS also designates critical habitat for threatened and endangered species listed under the FESA. Critical habitats are areas occupied by the species, located within a specific geographic region determined to be critical for survival, and protected from adverse modification. No critical

habitats were identified for federally threatened or endangered species in the Plan Area and Plan Area vicinity.¹⁴

(2) Migratory Bird Treaty Act

The USFWS is also responsible for implementing the Migratory Bird Treaty Act (MBTA). The MBTA implements a series of treaties between the United States, Mexico, and Canada that provide for the international protection of migratory birds. Wording in the MBTA makes it clear that most actions that result in taking or possession (permanent or temporary) of a protected species can be a violation of the Act. On December 27, 2017, the Department of the Interior issued an opinion that the MBTA only applies to the intentional and not the inadvertent take of species protected under the Act. The word “take” is defined as meaning “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.” However, this opinion from the Department of the Interior is only the latest interpretation from the current Administration of the MBTA. This legal opinion is contrary to the long-standing interpretation for over 40 years that held the MBTA strictly prohibits the intentional or incidental killing of birds or destruction of their nests when in active use.

(3) Clean Water Act

The Corps regulates discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. “Discharge of fill material” is defined as the addition of fill material into waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and subaqueous utility lines. Any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States is required to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” [33 C.F.R. Section 328.3(b)].

¹⁴ U.S. Fish and Wildlife Services (USFWS), 2018. Threatened & Endangered Species Active Critical Habitat Report. Available at: <https://ecos.fws.gov/ecp/report/table/critical-habitat.html>, accessed January 29, 2019.

Furthermore, jurisdictional “Waters of the U.S.” can be identified where they exhibit a defined bed and bank and ordinary high-water mark. The ordinary high water mark is defined by the Corps as “that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” [33 C.F.R. Section 328.3(e)].

b. State Regulations

(1) California Endangered Species Act

The CESA (Fish and Game Code (FGC) Section 2050 et seq.) was enacted in 1984 and establishes State policy to conserve, protect, restore, and enhance threatened or endangered species and their habitats. The CESA mandates that State agencies should not approve projects that jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. For projects that would affect a species that is on the federal and State lists, compliance with the FESA satisfies the CESA if the CDFW determines that the federal incidental take authorization is consistent with the CESA under FGC Code Section 2080.1. For projects that would result in “take” of a species that is only State listed, the project proponent must apply for a take permit under Section 2081(b).

(2) California Native Plant Protection Act

The California Native Plant Protection Act (CNPPA) of 1977 prohibits importation of rare and endangered plants into California, “take” of rare and endangered plants, and sale of rare and endangered plants. The CESA defers to the CNPPA, which ensures that State-listed plant species are protected when State agencies are involved in projects subject to CEQA. In this case, plants listed as rare under the CNPPA are not protected under the CESA but rather under CEQA.

The CNPS is a non-governmental conservation organization dedicated to the preservation of native flora in California. The CNPS has been involved in assembling, evaluating, and distributing information on special-status plant species in the State, as listed in the *Inventory of Rare and Endangered Plants of California* (2001 and electronic inventory update). CNPS has updated their rating system for the rarity of special-status plants, and now include both a California Rare Plant Rank and a Threat Rank. CEQA requires government agencies to consider environmental impacts of discretionary projects and to avoid or mitigate them where possible. Under Section 15380, CEQA provides protection for both State-listed species and for any other species which can be shown to meet the criteria for State listing. The CDFW recognizes that special-status plants with a California Rare Plant Rank of 1A (Presumed extinct in California), 1B (Rare, threatened, or endangered in California and elsewhere), and 2 (Rare and endangered in California, but are more common elsewhere) in the CNPS Inventory consist of plants that, in a majority of cases, would

qualify for listing and that these species should be addressed under CEQA review. In addition, the CDFW recommends, and local governments may require, protection of species which are regionally significant such as locally rare species, disjunct populations, essential nesting and roosting habitat for more common wildlife species, or plants with a CNPS California Rare Plant Rank of 3 (Plant species for which additional data is needed – a review list) and 4 (Plant species of limited distribution - a watch list).

(3) California Fish and Game Code

Under the State FGC, the CDFW provides protection from “take” for a variety of species. The CDFW also protects streams, water bodies, and riparian corridors through the Streambed Alteration Agreement process under Section 1601 to 1606 of the FGC. The FGC stipulates that it is “unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake” without notifying the Department, incorporating necessary mitigation, and obtaining a Streambed Alteration Agreement. CDFW’s jurisdiction extends to the top of banks and often includes the outer edge of riparian vegetation canopy cover.

Plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of California “Species of Special Concern”, or SSC species, developed by the CDFW. These species are broadly defined as animals that are of concern to the CDFW because of population declines and restricted distribution, and/or because they are associated with habitats that are declining in California. These species are sometimes inventoried in the CNDDDB, focusing on nesting, roosting, and congregation sites for non-listed species. In addition, wildlife species designated as “Fully Protected” or “Protected” may not be taken or possessed without a permit from the Fish and Game Commission and/or the CDFW.

FGC Section 3503.5 prohibits “take,” possession, or destruction of any raptor (e.g., bird of prey species in the orders Falconiformes and Strigiformes), including their nests or eggs. Violations of this law may include destruction of active raptor nests as a result of tree removal and disturbance to nesting pairs by nearby human activity that causes nest abandonment and reproductive failure.

Several provisions in the FGC provide for the protection of birds and bird nests in active use. Unless the FGC or its implementing regulations provide otherwise, under California law it is unlawful to:

- Take a bird, mammal, fish, reptile, or amphibian (FGC Section 2000).
- Take, possess, or needlessly destroy the nest or eggs of any bird (FGC Section 3503).
- Take, possess, or destroy any bird of prey in the orders Strigiformes (owls) and Falconiformes (such as falcons, hawks and eagles) or the nests or eggs of such bird (FGC Section 3503.5).

- Take or possess any of the 13 fully protected bird species listed in FGC Section 3511.
- Take any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird) (FGC Section 3800).
- Take or possess any migratory non-game bird as designated in the MBTA or any part of such bird, except as provided by rules or regulations adopted by the Department of the Interior I under the MBTA (FGC Section 3513).
- Take, import, export, possess, purchase, or sell any bird (or products of a bird), listed as an endangered or threatened species under the CESA unless the person or entity possesses an Incidental Take Permit or equivalent authorization from CDFW (FGC Section 2050 et seq.).

(4) State Regulated Waters

In addition to waters regulated by the CDFW under the Streambed Alteration Agreement process, the Regional Water Quality Control Board (RWQCB) is responsible for implementing Section 401 of the Clean Water Act and for upholding state water quality standards. Pursuant to Section 401 of the Act, projects that apply for a Corps permit for discharge of dredge or fill material and projects that qualify for a Nationwide Permit must obtain water quality certification. The RWQCB has taken an increasing role over regulating wetlands that are hydrologically isolated following the U.S. Supreme Court decision in 2001 regarding the case *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, which limits the jurisdictional authority of the Corps under Section 404. These hydrologically isolated features are now often regulated by the RWQCB under authority of Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act.

(5) McAteer-Petris Act

The McAteer-Petris Act was adopted to protect San Francisco Bay as a natural resource for the benefit of the public and to encourage development compatible with this protection. The San Francisco Bay Conservation and Development Commission (BCDC) is authorized by the McAteer-Petris Act to analyze, plan, and regulate San Francisco Bay and its shoreline. BCDC implements the San Francisco Bay Plan and regulates filling and dredging in the bay, its sloughs and marshes, and certain creeks and their tributaries. BCDC jurisdiction includes the waters of San Francisco Bay as well as a shoreline band that extends inland 100 feet from the high tide line. Any fill, excavation of material, or substantial change in use within BCDC jurisdiction requires a permit from BCDC.

c. Local Regulations

(1) City of Oakland General Plan

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

Open Space

Policy OS-1.2: Open Space Protection Priorities for Private Land. Conserve privately-owned areas with important natural resource values through a combination of land acquisition and development controls. Use the following criteria when developing priorities for acquisition or protection:

- Steep hillside parcels over 10 acres in size;
- Parcels with significant biological resources, including endangered species habitat and native plant communities;
- Parcels which can potentially link together or expand existing open space areas;
- Visually prominent properties, including ridgelines and other areas with high scenic value; and
- Properties where the use of eminent domain is not required.

Policy OS-1.3: Development of Hillside Sites. On large sites with subdivision potential, generally conserve ridges, knolls and other visually prominent features as open space. Maintain development regulations which consider environmental and open space factors such as land stability, plant, and animal resources, earthquake and fire hazards, and visual impacts, in the determination of allowable density. Where hillside development does occur, encourage creative architecture and site planning which minimizes grading and protects the natural character of the hills.

Policy OS-9.1: Protection of Natural Landforms. Design new development to preserve natural topography and terrain. Enhance prominent topographic features where appropriate by parks, plazas, or architectural expressions.

Conservation

Policy CO-1.1: Soil Loss in New Development. Regulate development in a manner which protects soil from degradation and misuse or other activities which significantly reduce its ability to support plant and animal life. Design all construction to ensure that soil is well secured so that unnecessary erosion, siltation of streams, and sedimentation of water bodies does not occur.

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-6.1: Creek Management. Protect Oakland's remaining natural creek segments by retaining creek vegetation, maintaining creek setbacks, and controlling bank erosion. Design future flood control projects to preserve the natural character of creeks and incorporate provisions for public access, including trails, where feasible. Strongly discourage projects which bury creeks or divert them into concrete channels.

Policy CO-7.1: Protection of Native Plant Communities. Protect native plant communities, especially oak woodlands, redwood forests, native perennial grasslands, and riparian woodlands, from the potential adverse impacts of development. Manage development in a way which prevents or mitigates adverse impacts to these communities.

Policy CO-7.2: Native Plant Restoration. Encourage efforts to restore native plant communities in areas where they have been compromised by development or invasive species, provided that such efforts do not increase an area's susceptibility to wildfire.

Policy CO-7.3: Forested Character. Make every effort to maintain the wooded or forested character of tree-covered lots when development occurs on such lots.

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.

Policy CO-7.5: Non-Native Plant Removal. Do not remove non-native plants within park and open space areas solely because they are non-natives. Plant removal should be related to other valid management policies, including fire prevention.

Policy CO-7.6: Rehabilitation of Damaged or Dead Vegetation. Encourage programs which rehabilitate, enhance, or replace damaged or dead vegetation as appropriate.

Policy CO-8.1: Mitigation of Development Impacts. Work with federal, state, and regional agencies on an ongoing basis to determine mitigation measures for development which could potentially impact wetlands. Strongly discourage development with unmitigable adverse impacts.

Policy CO-9.1: Habitat Protection. Protect rare, endangered, and threatened species by conserving and enhancing their habitat and requiring mitigation of potential adverse impacts when development occurs within habitat areas.

Policy CO-11.1: Protection from Urbanization. Protect wildlife from the hazards of urbanization, including loss of habitat and predation by domestic animals.

Policy CO-11.2: Migratory Corridors. Protect and enhance migratory corridors for wildlife. Where such corridors are privately owned, require new development to retain native habitat or take other measures which help sustain local wildlife population and migratory patterns.

The Land Use and Transportation Element (LUTE) of the City of Oakland General Plan was adopted in 1998. The LUTE policy pertaining to natural resources under potential adoption and development with the Specific Plan states the following:

Policy W3.3: Protecting and Preserving Wetland Plant and Animal Habitats. Native plant communities, wildlife habitats, and sensitive habitats should be protected and enhanced.

(2) City of Oakland Municipal Code

City of Oakland Tree Ordinance

City of Oakland Tree Preservation and Removal Ordinance (Oakland Municipal Code [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 9 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 to be Protected trees.

City of Oakland Creek Ordinance

Title 13, Chapter 13.16, City of Oakland Creek Protection, Storm Water Management, and Discharge Control Ordinance provides a high level of protection for creeks within Oakland's city limits. The ordinance defines a creek as "...a watercourse that is a naturally occurring swale or depression, or engineered channel that carries fresh or estuarine water either seasonally or year around."

In addition, under the ordinance definition a creek channel must be hydrologically connected to a waterway above or below a site location, and the channel must exhibit a defined bed and bank. A

creek protection permit is required whenever work is to be undertaken on a creekside property. Among other things, the ordinance prohibits the discharge of concentrated stormwater or other modification of the natural flow of water in a watercourse; development within a watercourse or within 20 feet from the top of the bank; and the deposition or removal of any material within a watercourse without a permit. Depending on the type of activity being permitted, conditions of approval may include the submittal of a creek protection plan and/or a hydrology report, revegetation with native plant species, the use of soil bioengineering techniques for bank stabilization and erosion control, and implementation of stormwater quality protection measures.

The following activities, among others, are typically not permitted:

- Removal of riparian vegetation;
- Culverting or undergrounding of a creek;
- Moving the location of a creek;
- Structures spanning a creek; and/or
- Riprap, rock gabions, or concrete within the bed or on the creek banks.

(3) City of Oakland Standard Conditions of Approval

The City's SCAs that are relevant to biological resources are listed below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-BIO-1: Bird Collision Reduction Measures (#29)

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 window panes 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 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 or 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 night-time 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&Rs.
 - Schedule nightly maintenance during the day or to conclude before 11:00 p.m., if possible.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-BIO-2: Tree Removal during Bird Breeding Season (#30)

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.

When Required: Prior to removal of trees

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-BIO-3: Tree Permit Required/Tree Protection during Construction/and Tree Replacement Plantings (#31)

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. .

When Required: Prior to approval of construction-related permit

Initial Approval: Permit approval by Public Works Department, Tree Division; evidence of approval submitted to Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: During construction

Initial Approval: Public Works Department, Tree Division

Monitoring/Inspection: Bureau of Building

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 24-inch box size, unless a smaller size is recommended by the arborist, except that three 15-gallon size trees may be substituted for each 24-inch box size tree where appropriate.
- iv. Minimum planting areas must be available on-site as follows:
 - For *Sequoia sempervirens*, 315 square feet per tree;
 - For other species listed, 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 1 year of planting shall be replanted at the project applicant's expense.

When Required: Prior to building permit final

Initial Approval: Public Works Department, Tree Division

Monitoring/Inspection: Bureau of Building

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section describes environmental impacts related to biological resources that could result from the implementation of the Specific Plan and reasonably foreseeable development expected to occur under the Plan. The section begins with the criteria of significance that establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the project and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

Implementation of the Plan would result in a significant impact to biological resources if it would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife, or United States Fish and Wildlife Service.
3. Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
4. Substantially interfere 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. Fundamentally conflict with any applicable habitat conservation plan or natural community conservation plan.
6. Fundamentally conflict with the City of Oakland Tree Protection Ordinance (OMC Chapter 12.36) by removal of protected trees under certain circumstances. **[NOTE:** Factors to be considered in determining significance include the number, type, size, location, and condition of (a) the protected trees to be removed and/or impacted by construction and (b) protected trees to remain, with special consideration given to native trees. Protected trees include *Quercus agrifolia* (California or coast live oak) measuring 4 inches dbh or larger, and any other

tree measuring 9 inches dbh or larger except eucalyptus and *Pinus radiata* (Monterey pine); provided, however, that 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 to be protected trees]; or

7. Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources. [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 riparian and/or aquatic habitat through (a) discharging a substantial amount of pollutants into a creek, (b) significantly modifying the natural flow of the water, (c) depositing substantial amounts of new material into a creek or causing substantial bank erosion or instability, or (d) adversely impacting the riparian corridor by significantly altering vegetation or wildlife habitat.]

b. Analysis and Findings

The Specific Plan is located within, and immediately adjacent to, a highly urbanized environment. The Plan Area is fully developed with buildings and city streets, but water bodies and aquatic habitats border the southern, eastern, and northern boundaries. Future development anticipated through implementation of the Specific Plan and its associated development is not expected to have direct or indirect impacts on the biological resources associated with the nearby Lake Merritt, the Lake Merritt Channel, Oakland Estuary, or Glen Echo Creek. The adoption and implementation of the Specific Plan is expected to have less-than-significant impacts on existing biological resources due to a history of urbanized development, regular human disturbance, condition of existing habitat in the Plan Area, and general avoidance of the landscaped margins that serve as buffers around Lake Merritt and the Lake Merritt Channel.

(1) Sensitive or Special Status Species (Criterion 1)

Several special-status animal species are identified as having a moderate or high potential to occur, or are known to occur, in or adjacent to the Plan Area. These include peregrine falcon, California brown pelican, Cooper's hawk, red-shouldered hawk, red-tailed hawk, Alameda song sparrow, double-crested cormorant, pallid bat, silver-haired bat, hoary bat, and big free-tailed bat. Other migratory birds protected under the federal Migratory Bird Treaty Act and/or the California Fish and Game Code, Sections 3500-3516 may also use the Plan Area for foraging, resting, and nesting. As discussed above, some areas in the Plan Area may provide foraging and roosting habitat for these special-status animal species, but breeding habitat is generally very limited due to urbanization and intensity of human activities. Maternity roosts for special-status bat species are not expected to occur in the Plan Area, and foraging opportunities would remain in open space areas along the shoreline of Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary. However, species potentially impacted by adoption and development under the

Specific Plan are likely to have adapted to the continuously evolving environments by which this portion of Oakland is defined.

Tree removal, building demolition, and other construction activities may cause disturbance to bird nests when in active use. Tree removal anticipated under the Specific Plan would have to comply with the City's SCAs, including SCA-BIO-2: Tree Removal During Bird Breeding Season (#30), which would ensure that appropriate protection of nesting trees is provided when in active use during the bird nesting season (February 1 through August 15). These restrictions would extend from December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats, which would include Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary.

New buildings anticipated under the Specific Plan would have to comply with measures designed to minimize bird collision with larger buildings, which would address the risk of special-status and other bird species colliding with buildings as they fly over the Plan Area. The City's SCA-BIO-1: Bird Collision Reduction Measures (#29) calls for minimizing the number of antennas and other rooftop structures, avoiding the use of mirrors in landscape design or bird-friendly attractants, applying bird-friendly glazing treatments on windows, reducing light pollution, and implementing operation and management activities that promote bird safety. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to sensitive or special status species.

(2) Riparian Habitat or other Sensitive Natural Community (Criterion 2)

No riparian habitat or other sensitive natural community types have been identified by the CNDDDB within, or immediately adjacent to, the Plan Area. Glen Echo Creek is a channelized stream that provides disjointed riparian habitat through residential and commercial areas north of the Plan Area. Northern coastal salt marsh is a sensitive natural community found around the shoreline of San Francisco Bay and historically occurred in the Plan Area along the Oakland Estuary and margins of Lake Merritt and the Lake Merritt Channel. However, extensive development and land use modification along the shoreline of these features has eliminated most of the salt marsh natural community from the Plan Area. The development program of the Specific Plan currently does not include any modifications to the shoreline of Lake Merritt, the Lake Merritt Channel, or the Oakland Estuary. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to riparian habit or other sensitive natural community.

(3) Regulated Waters (Criterion 3)

The Plan Area is adjacent to State and federally protected waters associated with Lake Merritt, the Lake Merritt Channel, the Oakland Estuary, and Glenn Echo Creek. No development programs associated with the Specific Plan currently include modifications to these regulated waters, but specific development applications could include new pathways or other shoreline modifications that could result in direct or indirect impacts to these features. Further environmental review of specific development applications would address any potential impacts on jurisdictional waters. Where modifications are unavoidable, applicants for specific developments within the Plan Area that could affect regulated waters would have to secure authorizations from the Corps, CDFW, RWQCB, and BCDC, where necessary, and would have to comply with all conditions pertaining to the protection of regulated waters. Compliance with the Creek Protection Ordinance and incorporation of the City's SCAs related to erosion control, stormwater management, and hazardous materials would serve to address potential degradation of water quality that could result from construction in the vicinity of these features. As discussed further in the Hydrology and Drainage Section, these include SCA-HYD-2: Erosion and Sedimentation Control Plan for Construction (#49), SCA-HYD-4: Site Design Measures to Reduce Stormwater Runoff (#52), SCA-HYD-5: Source Control Measures to Limit Stormwater Pollution (#53), SCA-HYD-6: NPDES C.3 Stormwater Requirements for Regulated Projects (#54), SCA-HYD-7: NPDES C.3 Stormwater Requirements for Small Projects (#55), SCA-HYD-9: Vegetation Management on Creekside Properties (#57), SCA-HYD-10: Creek Protection Plan (#58), and SCA-HYD-13: Bay Conservation and Development Commission Approval (#61). Conformance with these applicable SCAs would ensure that potential indirect impacts on regulated waters are reduced to the maximum extent feasible. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to regulated waters.

(4) Movement of Fish and Wildlife Species (Criterion 4)

The vast majority of the Plan Area is intensively developed with urban uses and provides only limited wildlife habitat values. Important habitat for fish and wildlife remains along the borders of the Plan Area associated with Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary. Lake Merritt serves as a major wintering site for thousands of ducks and other waterfowl during the fall, winter, and early spring. Migratory fish may also use the Oakland Estuary and the Lake Merritt Channel along the edge of the Plan Area as part of dispersal and access to Lake Merritt. However, no new crossings or other modifications to these important habitat features along the border of the Plan Area are proposed or anticipated as part of the Specific Plan, and no substantial interference to fish or wildlife movement opportunities along these natural features is anticipated.

The Specific Plan development program proposes increasing the intensity of residential, industrial, and office uses in parts of the Plan Area. However, birds and other wildlife associated with the nearby habitats of Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary are already acclimated to the light, noise and other disturbance from human activity. New buildings anticipated under the Specific Plan would have to comply with measures designed to minimize bird collision with larger buildings, which would address the risk to birds colliding with buildings as they fly over the Plan Area. The City's SCA-BIO-1: Bird Collision Reduction Measures (#29) calls for minimizing the number of antennas and other rooftop structures, avoiding the use of mirrors in landscape design or bird-friendly attractants, applying bird-friendly glazing treatments on windows, reducing light pollution, and implementing operation and management activities that promote bird safety. Wildlife common in urbanized areas would continue to utilize trees and other habitat features within the Plan Area, and no substantial interference with native resident or migratory wildlife is anticipated. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to movement of fish and wildlife species.

(5) Habitat Conservation Plan or Natural Community Conservation Plan (Criterion 5)

This criterion is not applicable to the Specific Plan because there are no adopted habitat conservation plans or natural community conservation plans in the Plan Area vicinity. The closest Habitat Conservation Plan is the East Contra Costa County Habitat Conservation Plan/Natural Community Conservation Plan, located more than 15 miles east of the Plan Area. Therefore, there would be no impact associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years related to a conflict with an adopted Habitat Conservation Plan or Natural Community Conservation Plan.

(6) City of Oakland Tree Protection Ordinance (Criterion 6)

Although the vast majority of the Plan Area is already developed with urban uses, there are numerous trees located in landscaped parks and open spaces and along street right-of-ways which may qualify as protected trees under the City of Oakland Tree Protection Ordinance (OMC, Title 12, Chapter 12.36). Implementation of the Specific Plan would lead to redevelopment and construction-related activities that could potentially impact protected trees through direct removal. However, most of the parcels under the development program of the Specific Plan have few protected trees or else ornamental species not considered to be protected under the City's ordinance. Nevertheless, removal of protected trees could occur as a result of implementing the Specific Plan and specific development applications within the Plan Area.

Future development associated with implementation of the Specific Plan would have to be in compliance with the City's SCAs related to tree protection, including SCA-BIO-3: Tree Permit

Required/Tree Protection during Construction/and Tree Replacement Plantings (#31). Compliance with applicable SCAs would serve to avoid any conflicts with the City's Tree Protection Ordinance and would ensure the impact to protected trees is reduced to the maximum extent feasible. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the City of Oakland Tree Protection Ordinance.

(7) City of Oakland Creek Protection Ordinance (Criterion 7)

Within the Plan Area, the Lake Merritt Channel would be the only feature protected under the City of Oakland Creek Protection Ordinance (OMC, Title 13, Chapter 13.16.120). While Glen Echo Creek is adjacent to the northern boundary of the Plan Area, no portion of the underground creek is actually daylighted within the Plan Area. Development or construction in or around the Lake Merritt Channel would be regulated by this Ordinance and require a Creek Protection Permit if work falls within the four categories outlined in the ordinance.

Although no development facilitated by the Specific Plan development program is anticipated to occur within the Lake Merritt Channel, development is anticipated to occur adjacent to the channel and could result in impacts to existing biological resources. Projects exempt from the Creek Protection Permit requirement must comply with the remaining portions of the Ordinance and must incorporate site design and landscape characteristics which maximize infiltration, provide retention or detention, slow runoff, and minimize impervious land coverage to the maximum extent practicable.

Development under the Specific Plan is not expected to increase stormwater runoff since work is only expected to replace existing structures within areas that are already fully developed. However, construction-related activities could increase sediment deposition into the channel if adequate BMPs are not implemented, adversely impacting the channel's water and habitat quality.

Compliance with the Creek Protection Ordinance and incorporation of the City's SCAs relating to erosion control, stormwater management, and hazardous materials would serve to address potential degradation of water quality that could result from construction under the development program and increase to impervious surfaces. As discussed further in *Chapter V.H, Hydrology and Water Quality*, these include SCA-HYD-2: Erosion and Sedimentation Control Plan for Construction (#49), SCA-HYD-4: Site Design Measures to Reduce Stormwater Runoff (#52), SCA-HYD-5: Source Control Measures to Limit Stormwater Pollution (#53), SCA-HYD-6: NPDES C.3 Stormwater Requirements for Regulated Projects (#54), SCA-HYD-7: NPDES C.3 Stormwater Requirements for Small Projects (#55), SCA-HYD-9: Vegetation Management on Creekside Properties (#57), SCA-HYD-10: Creek Protection Plan (#58), and SCA-HYD-13: Bay Conservation and Development Commission Approval (#61). Therefore, impacts associated with

implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the City's Creek Protection Ordinance.

c. Cumulative Biological Resource Impacts

The potential impacts of the Specific Plan on biological resources tend to be 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. This includes potential impacts on well-developed native vegetation (e.g., marshlands, native grasslands, oak woodlands, and riparian scrub and woodland, etc.), populations of special-status plant or animal species, and wetland features (including coastal salt marsh, brackish and freshwater marsh, and seasonal wetlands and drainages).

Adoption and anticipated development under the Specific Plan, as well as other future projects within the cumulative geographic context of the Plan Area, would be required to comply with local, State, and federal laws and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on sensitive biological resources. Environmental review of specific development proposals within the Plan Area, as part of the development program, should serve to ensure that important biological resources are identified, avoided, or adequately mitigated for where potential impacts are unavoidable, and would serve to prevent any significant adverse development-related impacts.

Because the City's SCAs would serve to reduce any potential biological impacts within the Plan Area to a less-than-significant level, the Specific Plan would not make a cumulatively considerable contribution to any significant cumulative impacts on special-status species, sensitive natural communities, or regulated waters. The impacts associated with implementation of the Specific Plan and its associated development would not contribute to a cumulative reduction of important wildlife habitat or impede wildlife movement opportunities. Therefore, cumulative impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to biological resources.

H. GEOLOGY AND SOILS

This section describes the current geologic and seismic conditions in the Plan Area and vicinity and analyzes how implementation of the Specific Plan and its associated development may affect these conditions. City Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified.

1. Setting

This section describes the geologic and seismic environment of the Plan Area and its vicinity based on published and unpublished geologic reports and maps, and technical reports from the U.S. Geological Survey (USGS), California Geological Survey (CGS), U.S. Department of Agriculture (USDA), and other sources. The Specific Plan policies and City Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified. No additional mitigation measures were determined necessary.

a. Geologic Conditions

The geology, topography and soils conditions for the Plan Area and its vicinity are described below.

(1) Geology

The Plan Area is located within the Coast Ranges geomorphic province,¹ a relatively geologically young and seismically active region.^{2,3} The Coast Ranges are mountain ranges (approximately 2,000 to 4,000, and occasionally 6,000 feet elevation above sea level) and valleys that trend northwest, approximately parallel to the San Andreas fault, from near the Oregon border to southern California. The only major break in the Coast Ranges is the depression containing San Francisco Bay within which the Plan Area is located.

Based on USGS regional mapping of the San Francisco Bay region, the majority of the Plan Area is underlain by beach and dune sand.^{4,5} The eastern and southern portions of the Plan Area near Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary are underlain by imported fill.

¹ A geomorphic province is a naturally defined geologic region that displays a distinct combination of features based on geology, faults, topography, and climate. Eleven geomorphic provinces are recognized in California.

² California Geological Survey (CGS), 2002. California Geomorphic Provinces, Note 36.

³ Norris, Robert M. and Robert W. Webb, 1976. Geology of California, 2nd Edition. J. Wiley & Sons, Inc.

⁴ Graymer et al., 2006. Geologic Map of the San Francisco Bay Region.

⁵ United States Geological Survey (USGS), 2016. San Francisco Bay Region Geology and Geologic Hazards. Available at: <http://geomaps.wr.usgs.gov/sfgeo/geologic/downloads.html>, accessed January 29, 2019.

Small portions of the Plan Area near Lake Merritt and the Lake Merritt Channel are underlain by marine terrace deposits. A portion of the Plan Area to the northwest is underlain by alluvium.

Bay Area Rapid Transit

The Bay Area Rapid Transit (BART) tunnels are an important subsurface feature in the Plan Area. The BART track alignments are shown on Figure V.H-1. As indicated in Figure V.H-1, the Plan Area contains the location where three different branches of the BART tracks (some of them in belowground tunnels) meet. The north-south trending branch is located aboveground where it crosses the Interstate (I-) 980 highway and goes belowground near the intersection of Northgate Avenue and 23rd Street. One east-west trending branch located at the southwest corner of the Plan Area is aboveground south of the I-880 highway and goes belowground where it turns north and crosses the I-880. The second east-west trending branch is located entirely underground and crosses the southwest portion of the Plan Area, underneath the Lake Merritt Channel.

(2) Topography

The Plan Area is urbanized and relatively flat. Elevations range from less than 20 to approximately 40 feet above the North American Vertical Datum of 1988.⁶ Lake Merritt is located to the east of the Plan Area, while the Lake Merritt Channel crosses the southwest corner of the Plan Area. The Oakland Estuary borders the southernmost edge of the Plan Area.

(3) Soils

Soil is generally defined as the unconsolidated mixture of mineral grains and organic material which mantles the land surfaces of the earth. Regional soil mapping indicates that the Plan Area contains soils classified as Urban Land or Urban Land Complexes (Table V.H-1). More than half of the Plan Area is classified as Urban Land-Baywood Complex; the Baywood soil is a sandy soil formed from wind deposits on beach ridges. The areas near Lake Merritt, Lake Merritt Channel, and the Oakland Estuary are classified as Urban Land and consist of imported fill. The northern portion of the Plan Area contains soils classified as Urban Land-Danville Complex; the Danville soil is a clay and loam soil formed from alluvial fans and fan terraces. The shrink-swell potential and hydrologic characteristics of the soil types found in the Plan Area are summarized in Table V.H-1 (and discussed in more detail below).

⁶ United States Geological Survey (USGS), 2015. Oakland West Quadrangle, California, 7.5-Minute Series.



Figure V.H-1
BART Tunnels within the Plan Area

TABLE V.H-1 SOILS IN THE PLAN AREA

Soil Association/ Name	Approximate Acreage	Soil Profile Summary ^b	Shrink-Swell Potential ^{b,c}	Hydrologic Soil Group ^{b,d}
Urban Land	211	Wet disturbed or natural soil material covered by pavement, buildings or other structures	NA	NA
Urban Land-Baywood Complex ^a	515	Loamy sand (0 to 60 inches)	Low	A
Urban Land- Danville Complex ^a	168	Clay loam (0 to 21 inches) Sandy clay (21 to 35 inches) Silty clay loam (53 to 80 inches)	Moderate High Moderate	C
Urban Land-Clear Lake Complex ^a	8	Clay (0 to 60 inches)	High	C
Urban Land-Tierra Complex ^a	0.5	Loam (0 to 12 inches) Clay (12 to 32 inches) Sandy clay loam (32 to 60 inches)	Low High Moderate	D

Note: NA = not applicable

^a Complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps.

^b For complexes, description is of the non-urban land soil in the complex.

^c Shrink-swell potential of soils is determined by measuring the linear extensibility, which is the change in length of an unconfined clod as moisture content is decreased from a moist to a dry state. A moderate, high, or very high shrink-swell potential can cause significant changes in soil volume as moisture content changes, which can result in damage to overlying improvements and buildings.

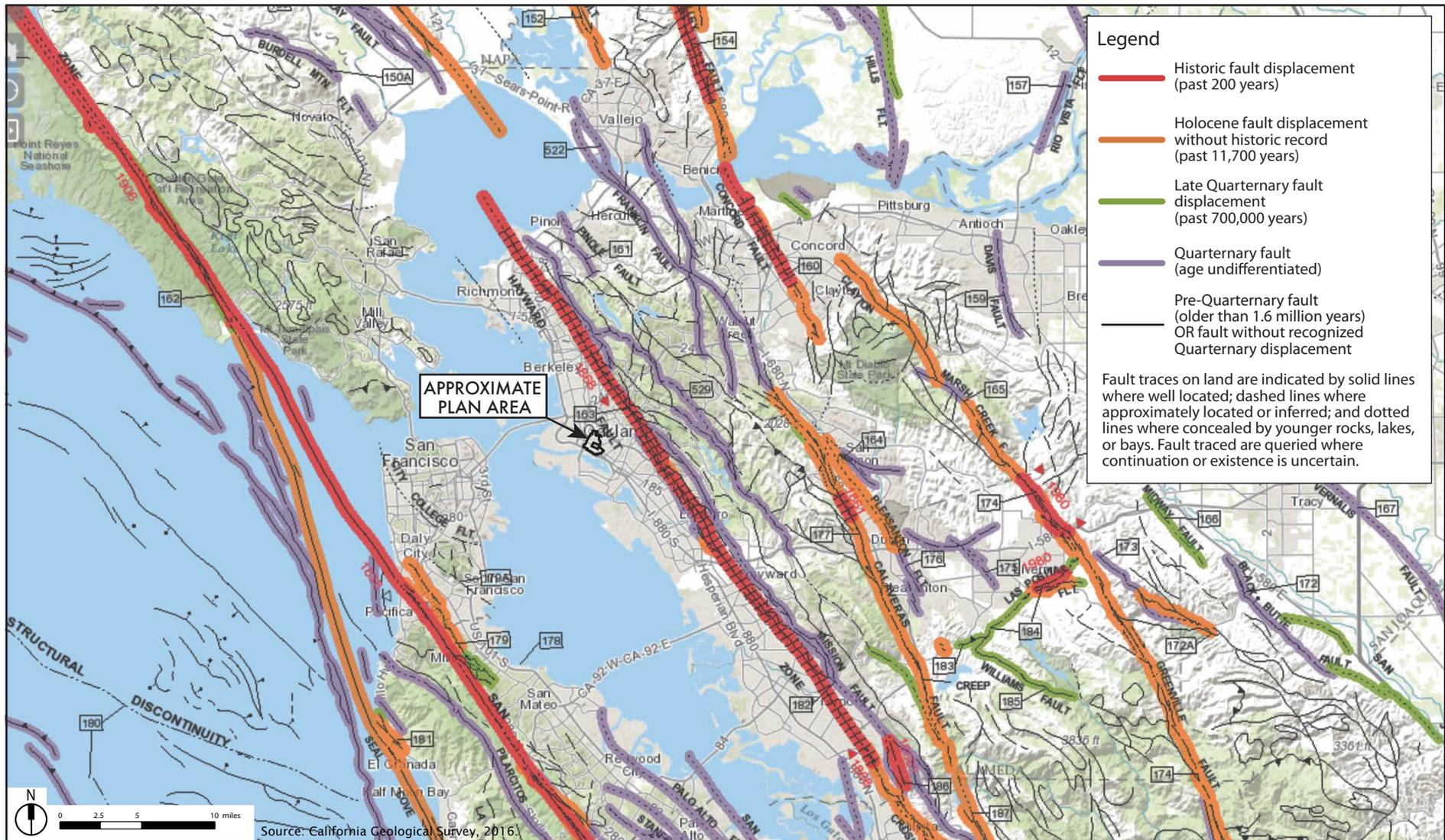
^d Hydrologic soil groups are based on estimates of runoff potential. Group A soils have a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. Group B soils have a moderate infiltration rate when thoroughly wet. Group C soils have a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material.

Source: Natural Resources Conservation Service (NRCS), 2019. USDA Mapping Website. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>, accessed January 29, 2019.

b. Seismic Conditions

The entire San Francisco Bay Area (Bay Area) is located within the San Andreas Fault Zone, a complex of active faults (i.e., active faults show evidence of rupture within the past 11,000 years). Numerous historic earthquakes have been generated in northern California by the San Andreas Fault Zone. This level of active seismicity results in relatively high seismic risk in the Bay Area. Regional active faults in the Bay Area are shown on Figure V.H-2.⁷

⁷ California Geological Survey (CGS), 2010. 2010 Fault Activity Map of California, Geologic Data Map No. 6. Available at: <http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html>, accessed April 25, 2016.



The Working Group on California Earthquake Probabilities and the USGS have predicted a 6.4 percent probability of a Moment Magnitude (M_w)⁸ 6.7 or greater earthquake on the Northern San Andreas Fault between 2014 and 2044, a 14.3 percent chance on the Hayward Fault, and a total probability of 72 percent that an earthquake of M_w 6.7 or greater will occur on one of the regional Bay Area faults during that time.⁹

c. Seismic, Soils, and Geologic Hazards

The artificial fill soils and natural geology underlying the Plan Area present potential hazards related to soil erosion, settlement, and expansive soils. Seismic hazards are generally classified in two categories: primary seismic hazards (surface fault rupture and ground shaking) and secondary seismic hazards (liquefaction and other types of seismically-induced ground failure, along with seismically-induced landslides). These hazards are discussed below and provide the initial context for further evaluation in the impact analysis.

(1) Surface Rupture

Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. Surface rupture generally can be assumed to occur along an active or potentially active major fault trace. The Plan Area is not located within an area mapped as subject to surface rupture under the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults cross the area.¹⁰ The nearest Alquist-Priolo Earthquake Fault Zone is the Hayward Fault, located about 2.7 miles east of the Plan Area (Figure V.H-2).¹¹

(2) Ground Shaking

Ground shaking is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. The Modified Mercalli Intensity (MMI) Scale is the most commonly used scale for measurement of the subjective effects of earthquake intensity (Table V.H-2). The MMI values range from I (earthquake not felt) to XII (damage nearly total), and

⁸ M_w , as opposed to Richter Magnitude, is now commonly used to characterize seismic events. M_w is determined from the physical size (area) of the rupture of the fault plane, the amount of horizontal and/or vertical displacement along the fault plane, and the resistance to rupture of the rock type along the fault.

⁹ Field, E.H. and 2014 Working Group on California Earthquake Probabilities, 2015. UCERF3: A New Earthquake Forecast for California's Complex Fault System, USGS Fact Sheet 2015-3009, March.

¹⁰ California Geological Survey (CGS), 2003. Earthquake Zones of Required Investigation, Oakland West Quadrangle. Earthquake Fault Zones revised January 1, 1982. Seismic Hazard Zones revised February 14, 2003. Available at: <http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm>, accessed January 29, 2019.

¹¹ California Geological Survey (CGS), 2010. 2010 Fault Activity Map of California, Geologic Data Map No. 6. Available at: <http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html>, accessed April 25, 2016.

intensities ranging from VI to XII can cause moderate to significant structural damage. As described above, the closest active fault to the Plan Area is the Hayward Fault. The Hayward Fault (both north and south segment together) is considered capable of generating an M_w 7.0 earthquake.¹² An earthquake of this magnitude on the Hayward Fault could generate very strong (MMI VIII) ground shaking in the Plan Area.¹³ The Plan Area also has the potential to experience moderate (MMI VI) to strong (MMI VII) ground shaking generated by earthquakes on other regional faults including the San Gregorio Fault, Rodgers Creek Fault, Calaveras Fault, and San Andreas Fault.¹⁴

(3) Liquefaction and Lateral Spreading

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Because saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths.

Lateral spreading is a form of horizontal displacement of soil toward an open channel or other “free” face, such as an excavation boundary. In a lateral spread failure, a layer of ground at the surface is carried on an underlying layer of liquefied material over a nearly flat surface toward a river channel or other bank. The lateral spreading hazard tends to mirror the liquefaction hazard for a site (assuming a free face is located nearby).

USGS regional studies for the Bay Area provide information on Quaternary (a period of geologic time from about 2.6 million years ago to present) deposits and liquefaction susceptibility in the area.¹⁵ Based on these regional studies, mapping by the Association of Bay Area Governments (ABAG) indicates that the majority of the Plan Area has moderate liquefaction susceptibility, with areas near Lake Merritt, Lake Merritt Channel, and the Oakland Estuary having very high liquefaction susceptibility, and some of the northern portion of the Plan Area having low liquefaction susceptibility.¹⁶ Liquefaction Susceptibility is shown in Figure V.H-3. Areas with

¹² Association of Bay Area Governments (ABAG), 2013. Shaking Scenarios. Available at: <http://resilience.abag.ca.gov/earthquakes/Alameda/>, accessed April 25, 2016.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ United States Geological Survey (USGS), 2006. Maps of Quaternary Deposits and Liquefaction Susceptibility in the Central San Francisco Bay Region. Available at: <http://pubs.usgs.gov/of/2006/1037/>, accessed January 29, 2019.

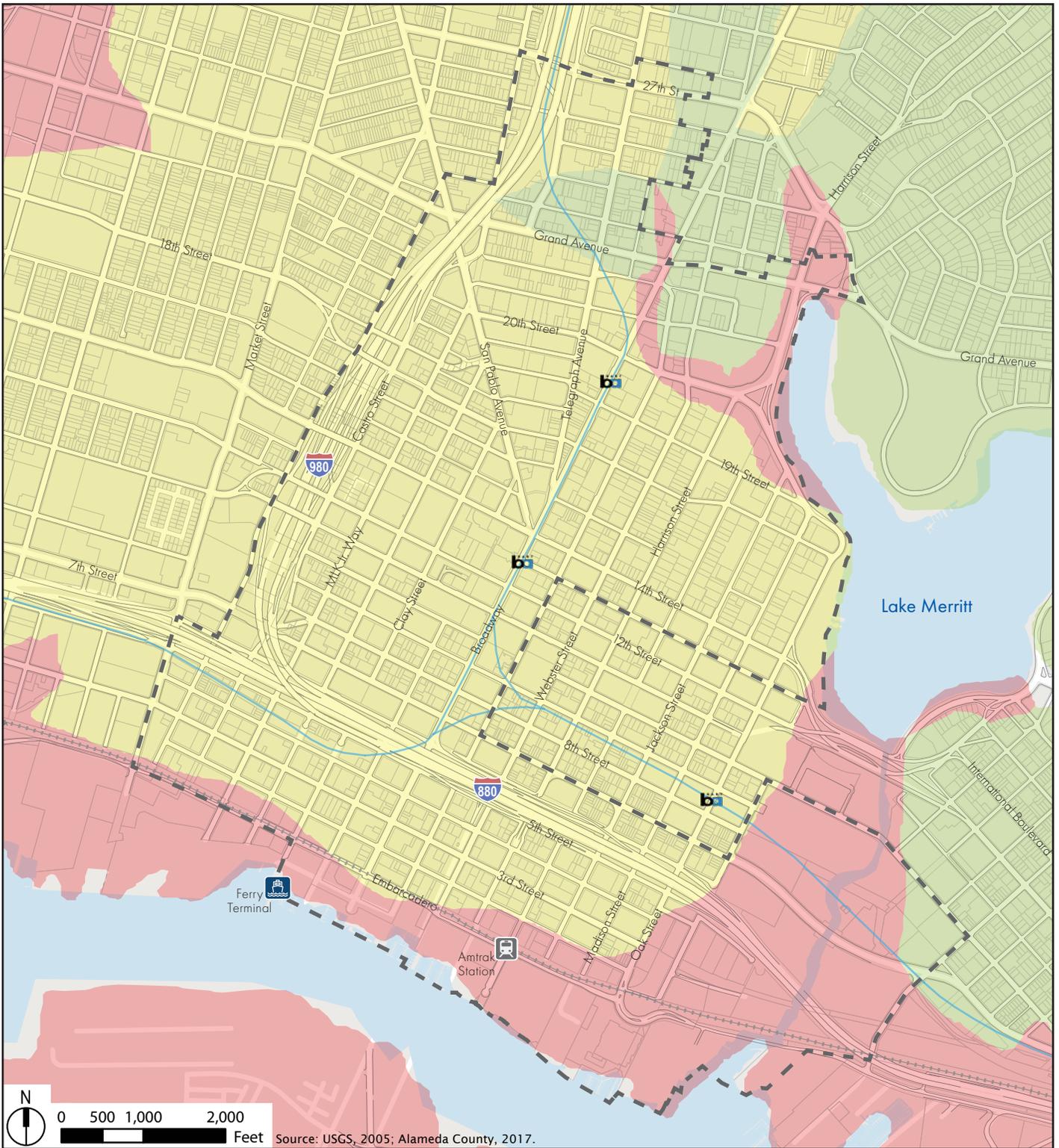
¹⁶ Association of Bay Area Governments (ABAG), 2013. Liquefaction Susceptibility. Available at: <http://resilience.abag.ca.gov/earthquakes/Alameda/>, accessed April 25, 2016.

TABLE V.H-2 MODIFIED MERCALLI SCALE

I	Not felt except by a very few under especially favorable circumstances.
II	Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing.
III	Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.
IV	During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Felt by nearly everyone, many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
VI	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
VII	Everybody runs outdoors. Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
VIII	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.
IX	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
X	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.
XI	Few, if any, (masonry) structures remain standing. Bridges destroyed. Board fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
XII	Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted.

Source: California Geology Survey (CGS), 2002. How Earthquakes and Their Effects are Measured, Note 32.

liquefaction susceptibility located adjacent to Lake Merritt, Lake Merritt Channel, and the Oakland Estuary could also be subject to lateral spreading due to the open faces at the water bodies. It should be noted that this designation is based on regional mapping and may not be accurate at a parcel level. Regional studies can provide guidance for general planning and hazard potential assessment; however, site-specific studies would be necessary to assess the design and engineering requirements for any particular site within the Plan Area.



Legend

- Downtown Plan Boundary
- Low Liquefaction Susceptibility
- Moderate Liquefaction Susceptibility
- Very High Liquefaction Susceptibility
- ba BART Station
- BART Line
- Railroad

Downtown Oakland Specific Plan EIR

**Figure V.H-3
Liquefaction Susceptibility**

(4) Landslides

Slope failure can occur as either rapid movement of large masses of soil (landslide) or slow, continuous movement (creep) on slopes of varying steepness. Areas susceptible to landslides are characterized by steep slopes and downslope creep of surface materials. The Plan Area, as well as surrounding areas, are relatively flat and therefore not subject to landslides or other slope stability hazards. In addition, the Plan Area is not included in an area deemed susceptible to earthquake-induced landslides.¹⁷

(5) Settlement, Differential Settlement, and Subsidence

Settlement is the lowering of the land surface elevation as a result of loading (i.e., placing heavy loads, typically fill or structures), which often occurs with the development of a site. Settlement or differential (i.e., unequal) settlement could occur if buildings or other improvements are built on low-strength foundation materials (including imported non-engineered fill) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and/or new engineered fill). Although settlement generally occurs slowly enough that its effects are not dangerous to inhabitants, it can cause significant building damage over time. Loose or uncontrolled (non-engineered) fill and variable soil conditions are found throughout the Plan Area.

Subsidence is the lowering of the land-surface elevation. The mechanism for subsidence is generally related to groundwater pumping and subsequent consolidation of loose aquifer sediments. The primary hazards associated with subsidence are increased flooding hazards and damage to underground utilities as well as above-ground structures. Other effects of subsidence include changes in the gradients of stormwater and sanitary sewer drainage systems for which the flow is gravity driven.

(6) Expansive Soils

Expansion and contraction of soil volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. Shrink-swell potential is also influenced by the location of the soils; soils below the groundwater table maintain a steady moisture content and would therefore not be subject to shrink-swell effects.

¹⁷ California Geologic Survey (CGS), 2003. State of California Seismic Hazard Zones, Oakland West Quadrangle Official Map. Released February 14.

As a consequence of volume changes due to expansive soils, structural damage to buildings and infrastructure can occur if potentially expansive soils are not considered in project design and during construction. The soils in the Plan Area range from low to very high shrink-swell potential (i.e., low to very high linear extensibility) (Table V.H-1). Moderate to very high shrink-swell potential soils are classified as expansive soils, which can pose geotechnical hazards to subsurface utilities and building foundations.¹⁸

2. Regulatory Framework

Federal, State, and local regulations and programs related to geology, seismicity, soils and building safety that are applicable to the Plan Area are described below.

a. Federal

(1) Federal National Earthquake Hazards Reduction Program

The National Earthquake Hazards Reduction Program (NEHRP) was established by the US Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law 95-124. In establishing NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early-warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic NEHRP goals are:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide State, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

¹⁸ Natural Resources Conservation Service (NRCS), 2019. USDA Mapping Website. Available at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>, accessed January 29, 2019.

b. State

(1) California Alquist-Priolo Earthquake Fault Zoning Act

The California Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972, and its main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active earthquake faults. The Alquist-Priolo Earthquake Fault Zoning Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of known active faults and to issue appropriate maps. "Earthquake Fault Zones" were called "Special Studies Zones" prior to January 1, 1994. The maps are distributed to all affected cities, counties, and state agencies for their use in planning and controlling new or renewed construction. Local agencies must regulate most development projects within the zones. As mentioned above, the Plan Area is not located within an area mapped as subject to surface rupture under the Alquist-Priolo Earthquake Fault Zoning Act, and no known active or potentially active faults cross the Plan Area.

(2) California Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code (PRC), Section 2690- 2699.6) directs the Department of Conservation, California Geological Survey to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. The purpose of the Seismic Hazards Mapping Act is to minimize loss of life and property through the identification, evaluation, and mitigation of seismic hazards. The Seismic Hazards Mapping Act was passed by the legislature following the 1989 Loma Prieta earthquake. As a result, CGS geologists gather existing geological, geophysical and geotechnical data from numerous sources to produce the Seismic Hazard Zone Maps. They integrate and interpret this data regionally in order to evaluate the severity of the seismic hazards and designate as Zones of Required Investigation those areas prone to ground shaking, liquefaction, and earthquake-induced landslides. Cities and counties are then required to use the Seismic Hazard Zone Maps in their land use planning and building permit processes. The Seismic Hazards Mapping Act requires that site-specific geotechnical investigations be conducted within Zones of Required Investigation to identify and evaluate seismic hazards and formulate mitigation measures prior to permitting most developments designed for human occupancy. The CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, ground shaking, and landslides (primarily the Bay Area and the Los Angeles basin). The portions of the Plan Area with Very High susceptibility to liquefaction (Figure V.H-3) generally coincide with the seismic hazard areas identified in the Seismic Hazard Zone Map of the area.¹⁹

¹⁹ California Geological Survey (CGS), 2003. Earthquake Zones of Required Investigation, Oakland West Quadrangle. Earthquake Fault Zones revised January 1, 1982. Seismic Hazard Zones revised February 14, 2003. Available at: <http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm>, accessed January 29, 2019.

(3) California Building Standards Code

The 2016 California Building Code, which refers to Part 2 of the California Building Standards Code in Title 24 of the California Code of Regulations, is based on the 2015 International Building Code, and is the most current State building code. The 2016 California Building Code covers grading and other geotechnical issues, building specifications, and non-building structures. The City of Oakland Municipal Code amends the most current State building codes, as indicated in Municipal Code Chapter 15.04. The City's Bureau of Building is responsible for reviewing plans, issuing building permits, and conducting field inspections.

The California Building Code requires that a site-specific geotechnical investigation report be prepared by a licensed professional for proposed developments of one or more buildings greater than 4,000 square feet to evaluate geologic and seismic hazards. Buildings less than or equal to 4,000 square feet also are required to prepare a geologic engineering report, except for one-story, wood-frame, and light-steel-frame buildings that are located outside of the Alquist-Priolo Earthquake Fault Zones. The purpose of the geotechnical investigation is to identify seismic and geologic conditions that require project mitigation, such as ground shaking, liquefaction, differential settlement, and expansive soils. Based on the conditions of the site, the building code requires specific design parameters to ensure construction of buildings that will resist collapse during an earthquake. These design parameters do not protect buildings from all earthquake shaking hazards but are designed to reduce hazards to a manageable level. Requirements for the geotechnical investigation are presented in Chapter 16 "Structural Design" and Chapter 18 "Soils and Foundation" of the 2016 California Building Code. Geotechnical investigation reports for individual projects within the Plan Area would be reviewed by the City's Bureau of Building prior to issuance of building permits.

c. City of Oakland

The City of Oakland General Plan policies, Municipal Code chapters, and Standard Conditions of Approval related to geology and seismicity are described below.

(1) General Plan

The following policies and action items from the Open Space, Conservation, and Recreation Element²⁰ and the Safety Element²¹ of the City of Oakland General Plan specifically address soils, geology, and/or seismic hazards, and are applicable to the Specific Plan.

²⁰ City of Oakland, 1996. Open Space, Conservation, and Recreation (OSCAR): An Element of the General Plan, June.

²¹ City of Oakland, 2004. Protect Oakland: City of Oakland General Plan, Safety Element, November. Amended 2012.

Policy Statements Related to Geologic Hazards

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.

Policy GE-2: Continue to enforce ordinances and implement programs that seek specifically to reduce the landslide and erosion hazards.

- Action GE-2.1: Continue to enforce provisions under the subdivision ordinance requiring that, under certain conditions, geotechnical reports be filed and soil hazards investigations be made to prevent grading from creating unstable slopes, and that any necessary corrective actions are taken.
- Action GE-2.2: Continue to enforce the grading, erosion and sedimentation ordinance by requiring, under certain conditions, grading permits and plans to control erosion and sedimentation.

Policy GE-3: Continue, enhance or develop regulations and programs designed to minimize seismically related structural hazards from new and existing buildings.

- Action GE-3.1: Adopt and amend as needed updated versions of the California Building Code so that optimal earthquake-protection standards are used in construction and renovation projects.
- Action GE-3.2: Continue to enforce the unreinforced masonry ordinance to require that potentially hazardous unreinforced masonry buildings be retrofitted or be otherwise made to reduce the risk of death and injury from their collapse during an earthquake.
- Action GE-3.3: Continue to enforce the earthquake-damaged structures ordinance to ensure that buildings damaged by earthquakes are repaired to the extent practicable.
- Action GE-3.4: Consider developing a program to encourage, assist or provide incentives to owners of single-family homes or small apartment buildings in retrofitting their buildings for seismic safety.

Policy GE-4: Work to reduce potential damage from earthquakes to "lifeline" utility and transportation systems.

- Action GE-4.1: Encourage Caltrans to expedite the retrofit of city- and county owned highway overpasses in Oakland identified as candidates for seismic strengthening for which Caltrans is the lead agency.
- Action GE-4.2: As knowledge about the mitigation of geologic hazards increases, encourage public and private utility providers to develop additional measures to further strengthen utility

systems against damage from earthquakes, and review and comment on proposed mitigation measures.

- Action GE-4.3: Encourage BART to prioritize its program for retrofitting the system's aerial structures, stations, and Transbay Tube for seismic safety over expansion of the system.
- Action GE-4.4: Continue to designate underground utility districts for the purpose of replacing aboveground electric and phone wires and other structures with underground facilities and use the planning-approval process to ensure that all new utility lines will be installed underground from the start.

Policy Statements Related to Soils

Policy CO-1.1: Soil loss in new development. Regulate development in a manner which protects soil from degradation and misuse or other activities which significantly reduce its ability to support plant and animal life. Design all construction to ensure that soil is well secured so that unnecessary erosion, siltation of streams, and sedimentation of water bodies does not occur.

- Action CO-1.1.1: Soil-related development controls—Maintain, enforce, and periodically review development controls affecting soil removal, including the Grading Ordinance and the Sedimentation and Erosion Control Ordinance.
- Action CO-1.1.3: Consideration of soil constraints in development—Consider soil constraints such as shrink-swell and low soil strength in the design of buildings and roads. Suitable base materials and drainage provisions should be incorporated where necessary.

Policy CO-2.2: Unstable geologic features. Retain geologic features known to be unstable, including serpentine rock, areas of known landsliding, and fault lines, as open space. Where feasible, allow such lands to be used for low-intensity recreational activities.

- Action CO-2.2.1: Geo-technical study requirements—Maintain Standard Operating Procedures in the Office of Planning and Building which require geo-technical studies for major developments in areas with moderate to high ground shaking or liquefaction potential, or other geologically unstable features.

Policy CO-2.3: Development on filled soils. Require development on filled soils to make special provisions to safeguard against subsidence and seismic hazards.

(2) Municipal Code

The City of Oakland has a number of ordinances aimed at mitigating seismic and other geologic hazards. These ordinances are summarized below.

- The City's subdivision ordinance (Title 16 of the Oakland Municipal Code) requires developers to file soil reports indicating any soil characteristics which may create hazards and identifying measures to avoid soil hazards and prevent grading from creating unstable slopes.

- The unreinforced masonry ordinance (Chapter 15.28) implements the State’s unreinforced masonry building law by, among other things, requiring building owners to retrofit their properties within a specified time.
- The multi-unit residential unit ordinance (Chapter 15.27) requires the mandatory seismic evaluation and retrofit of wood-frame buildings constructed prior to January 1, 1991, that are three or more stories tall (or two stories over a basement), with five or more dwelling units.
- The earthquake-damaged structures ordinance (Chapter 15.24) establishes regulations and standards governing the alteration, repair, restoration and rehabilitation of earthquake-damaged buildings.
- The geologic reports ordinance (Chapter 15.20) implements the state’s Alquist-Priolo Earthquake Fault Zoning Act.
- The City’s building construction standards (Chapter 15.04) are based on the California Building Standards Code and amended to reflect local conditions. The standards include the grading, excavations, and fills ordinance (Chapter 18B), which establishes standards governing the application for a grading permit and the necessary steps to meet grading permit requirements.

(3) Standard Conditions of Approval

The City’s SCAs that are relevant to geologic, soils, and seismic hazards are list below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-GEO-1: Construction-Related Permit(s) (#37)

Applicable To: All projects requiring a construction-related permit.

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-GEO-2: Soils Report (#38)

Applicable To: All projects involving 1) a subdivision (except condominium subdivisions and subdivisions between existing buildings with no new structures) per OMC sections 16.20.060 and 16.24.090 or 2) a grading permit per OMC section 15.04.660. The condition does not apply to projects located in an Earthquake Fault Zone or a Seismic Hazards Zone (see other conditions applicable to those projects).

Requirement: The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval. The soils report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the

recommendations contained in the approved report during project design and construction.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction) (#40)

Applicable To: all projects located in a Seismic Hazards Zone per the State Seismic Hazards Mapping Act (pertaining to seismically-induced liquefaction and landslides) and involve at least one of the following:

- New structures (except single-family dwellings not part of a development of four or more dwellings);
- Major additions or alterations (defined as exceeding 50% of the value of the structure or 50% of the floor area of the structure); or
- Subdivisions (except condominium subdivisions and subdivisions between existing buildings with no new structures).

Requirement: The project applicant shall submit a site-specific geotechnical report, consistent with California Geological Survey Special Publication 117 (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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section analyzes impacts related to geology, soils, and seismicity that could result from the implementation of the Specific Plan and its associated development. This section begins with the criteria of significance that establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would result in a significant geological and seismic impacts if it would:

1. Expose people or structures to substantial risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or Seismic Hazards Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.
 - Strong seismic ground shaking.

- Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, and collapse.
 - Landslides.
2. Result in substantial soil erosion or 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, 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.
 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.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Analysis and Findings

The Specific Plan would facilitate development and growth within the Plan Area. This analysis reviews applicable regulations and guidelines and published geologic, soils, and seismic maps and studies to determine the exposure of the Plan Area and vicinity to geological and seismic risks. These documents and maps provide broad information on fault locations, estimated ground shaking response, liquefaction potential, and soil characteristics. The Specific Plan does not include any policies specific to geologic or seismic conditions.

Potential impacts are consequently discussed in broad, qualitative terms. The potential impacts are analyzed within the context of existing plans and policies, permitting requirements, local ordinances, and the City of Oakland's SCAs. Impacts that would be substantially reduced or eliminated by compliance with these policies or requirements are found to be less than significant.

(1) Surface Rupture (Criteria 1)

Surface fault rupture occurs when the ground surface is broken due to fault movement during an earthquake. Fault rupture is generally expected to occur along known active fault traces. Areas susceptible to fault rupture are delineated by the CGS Alquist-Priolo Earthquake Fault Zones map and require specific geological investigations prior to development to reduce the threat to public health and safety and to minimize the loss of life and property posed by earthquake-induced ground failure. The Plan Area is not located within or adjacent to an Alquist-Priolo Earthquake Fault Zone or an active fault included on a Seismic Hazards Map (Figure V.H-2).

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the risk of surface fault rupture.

(2) Seismic Ground Shaking and Ground Failure (Criteria 1)

The Specific Plan would increase the density of residential, office space, and retail arts spaces. To accommodate this, the Plan would allow for unlimited building heights in some portions of the Plan Area. In areas where restrictions on building heights would be in place, the maximum allowable heights range from 45 feet to 450 feet. The intensification of land uses would increase the number of people and structures that could be directly or indirectly affected by seismic ground shaking and ground failure hazards. Based on regional mapping, developments within the Plan Area would be potentially subject to damage from seismic ground shaking, liquefaction, lateral spreading, and differential settlement.

The Plan Area is built out and water is provided via the water supply utility, East Bay Municipal Utility District. There are no significant agricultural or industrial activities planned that would result in the substantial pumping withdrawal of water from the underlying aquifer. Projects developed under the Specific Plan would connect to the EBMUD water system and would not use groundwater at the site. Although no use of groundwater is anticipated under the Specific Plan, dewatering would be required during construction of projects within the Plan Area, which could cause localized subsidence. Such subsidence could potentially adversely affect structures, utilities, and pavements located near a project if not properly controlled through measures such as the use of appropriately designed dewatering systems, shoring systems, excavation cut-off walls, and/or ground improvement.²²

²² Soil improvement techniques involve changing soil characteristics using a physical action, such as compaction, and/or using a chemical action, such as injecting grout into the soil. Soil improvements serve multiple purposes including strengthening weak soil, and controlling shoring system deflections, settlement of nearby facilities, and groundwater leakage.

All development within the Plan Area would be subject to the California Building Code. Additionally, portions of the Plan Area are within a Seismic Hazard Zone and subject to the Seismic Hazards Mapping Act (the Seismic Hazard Zones within the Plan Area are generally consistent with the areas of Very High liquefaction susceptibility illustrated in Figure V.H-3). To ensure compliance with the California Building Code and Seismic Hazards Mapping Act, the City of Oakland requires compliance with the SCAs related to geology and soils prior to approval of construction-related permits. All development projects within the Plan Area would be required to comply with SCA-GEO-1: Construction-Related Permit(s) (#37) and with either SCA-GEO-2: Soils Report (#38) or SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction) (#40). SCA-GEO-1: Construction-Related Permit(s) (#37) would require the projects to comply with all standards, requirements, and conditions contained in construction-related codes, City of Oakland Municipal Codes, and the California Building Code, as amended locally, to ensure structural integrity and safe construction. Geotechnical and structural engineers have a number of techniques to make buildings better able to withstand strong seismic ground shaking, including designing foundations, floors, and walls to transfer the shaking energy downward through the building and back to the ground and reinforcing the joints between load bearing components of a building so that the building will remain structurally sound, even when its joints are bent or misshapen by earthquake forces. Unstable soils can be addressed by removing and replacing soil, designing the foundation to respond specifically to the potential soil hazards, or other means.

SCA-GEO-2: Soils Report (#38) would require projects outside of a Seismic Hazards Zone to prepare a soils report with field test results and observations about site-specific soil characteristics and to implement any recommendations regarding appropriate grading practices and project design. SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction) (#40) would require projects within a Seismic Hazards Zone to prepare a site-specific geotechnical report. The report must be consistent with CGS Special Publication 117 (as amended) and contain, 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 hazards.²³ The recommendations contained in the approved report must be implemented during project design and construction.

Much of the Plan Area is located in older parts of Oakland that contain areas that were built-up prior to the development of modern building codes. Buildings constructed of unreinforced masonry have been widely recognized for experiencing extensive, potentially life-threatening damage including partial or total collapse during moderate to strong earthquakes. By adding new buildings that meet the most current code requirements, upgrading some older buildings so that they meet current codes, and replacing some older, non-conforming structures with ones that

²³ California Geological Survey (CGS), 2008. Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California. Revised and Re-adopted September 11.

meet the most current code requirements, development and redevelopment under the Specific Plan would be expected to reduce vulnerability compared to existing conditions. Compliance with the City of Oakland's SCAs and Municipal Code would ensure that the development projects within the Plan Area would be designed and constructed to account for and withstand seismic and geologic hazards, thereby substantially reducing the risk of people and structures being directly or indirectly affected by loss, injury, or death during a large regional earthquake.

BART tunnels that cross the Plan Area (Figure V.H-1) may present additional geotechnical challenges related to the foundation design of proposed new overlying structures. Without adequate engineering and design, projects located near or above the BART Tunnels could result in ground failure that would damage the new development, surrounding buildings, and/or the BART tunnels.

Development projects located near a BART tunnel alignment would be required to comply with BART's guidelines for construction near their subway structures.²⁴ These guidelines indicate that structures over or adjacent to BART's subway structures must be designed and constructed to not impose any temporary or permanent adverse effects on the subway structures. These guidelines include the following:

- Maintaining a minimum clearance of 7.5 feet between adjacent structures and the subway structure, with a minimum cover of 8 feet wherever possible;
- Limits for vertical loading;
- Requirements for shoring within the Zone of Influence;²⁵
- Analysis of soil redistribution caused by temporary shoring or permanent foundation system;
- Monitoring of dewatering for changes in groundwater level (recharging is required if groundwater level is expected to drop more than 2 feet);
- Pre-drilling piles to 10 feet below the Line of Influence;²⁶ and
- Performing monitoring of vibration, movement and deformation of structures.

Pertinent design and construction documents must be submitted to BART for review and approval. In addition, the following must be submitted to BART as applicable:²⁷

²⁴ Bay Area Rapid Transit (BART), 2003. General Guidelines for Design and Construction Over or Adjacent to BART's Subway Structures, July 23.

²⁵ The BART zone of influence is defined as the area above a line from the critical point of the substructure at a slope of 1½ horizontal to 1 vertical (line sloping towards ground level).

²⁶ The BART line of influence is defined as a line from the critical point of the substructure at a slope of 1½ horizontal to 1 vertical (line sloping towards ground level).

²⁷ The BART line of influence is defined as a line from the critical point of the substructure at a slope of 1½ horizontal to 1 vertical (line sloping towards ground level).

- Geologic Hazards Evaluation and Geotechnical Investigation reports;
- Dewatering monitoring and recharging plans;
- Vibration monitoring plan and/or movement and deformation monitoring plans;
- Foundation plan showing the anticipated total foundation loads;
- Excavation plan for area within the zone of influence showing excavation slope or shoring system; and
- Procedures and control of soil compaction operation.

The BART review at each design stage would consist of structural engineering review and geotechnical engineering review by BART's qualified experts. Compliance with BART's requirements for construction over and adjacent to subway structures would ensure that the development projects within the Plan Area would be designed and constructed to account for potential instability existing in areas located above or near BART tunnels.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to ground shaking and ground failure.

(3) Landslides (Criterion 1)

Implementation of the Plan would not be affected by slope instability because the Plan Area and surrounding areas are relatively flat. Furthermore, the Plan Area is not within an earthquake-induced landslides hazard zone as designated on mapping prepared by the CGS.²⁸

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the risk of landslides.

(4) Soil Erosion and Loss of Topsoil (Criterion 2)

Potential impacts from the loss of topsoil and soil erosion are discussed in *Section V.J, Hydrology and Water Quality*, of this Draft EIR.

²⁸ California Geological Survey (CGS), 2003. State of California Seismic Hazard Zones, Oakland West Quadrangle Official Map. Released February 14.

(5) Expansive Soils (Criterion 3)

Regional soil mapping indicates that the Plan Area contains soils with moderate to high shrink-swell potential (Table V.H-1). These soils are expansive and, if not properly managed, could result in structural damage to buildings and underground utilities developed within the Plan Area. As described above, development projects under the Specific Plan would be required to comply with SCA-GEO-1: Construction-Related Permit(s) (#37) and with SCA-GEO-2: Soils Report (#38) or SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction) (#40). Compliance with these measures would require the investigation of development sites prior to construction. This would ensure that expansive soils are identified at each project site within the Plan Area, and that development projects under the Specific Plan implement construction methods and building designs consistent with the California Building Code, as locally amended, that would prevent damage to structures and utilities from expansive soils.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to expansive soils with adherence to the existing building code and SCAs.

(6) Located Above a Well, Pit, Swamp, Mound, Tank Vault, or Unmarked Sewer Line (Criterion 4)

As described in the Specific Plan, the first buildings in the Plan Area were constructed in the late 1850s to early 1860s. From that time forward, development continued and the Plan Area urbanized. Due to both current and historic development within the Plan Area, individual properties may contain known and unknown groundwater wells, former pits and swamps, mounds, tank vaults, and/or unmarked sewer lines.

As described above, development projects under the Specific Plan would be required to comply with SCA-GEO-2: Soils Report (#38) or SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction) (#40), both of which require the investigation of proposed development sites prior to construction, which would address any known or suspected underground features. Furthermore, following the City's grading, excavations, and fills ordinance (Chapter 18B), if wells or any other abandoned structure (i.e., pits, mounds, septic tank vaults, sewer lines) are discovered during grading or excavation at a future development site under the Specific Plan, the civil engineer responsible for inspection and testing of the work in progress must respond to such unforeseen conditions by reporting necessary changes to the work plans that would ensure such features are fully removed and/or filled to eliminate subsurface voids.²⁹ Compliance with these SCAs and existing regulations would enable development projects to identify and address the

²⁹ City of Oakland Municipal Code (OMC) Section 1802B.9 Permit Application: Initial Statement(s) of the Civil Engineer(s) in Responsible Charge—Responsibilities Defined.

direct and indirect hazards that could result from construction above a well, pit, swamp, mound, tank vault, or unmarked sewer line.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to development projects located above a well, pit, swamp, mound, tank vault, or unmarked sewer line.

(7) Located Above a Landfill or Unknown Fill Soils (Criterion 5)

There are no landfills currently active within the Plan Area. No records of a historic landfill within the Plan Area have been identified (for a detailed description of the site history related to hazardous materials, please refer to *Section V.I, Hazards and Hazardous Materials*, of this Draft EIR). However, because historical uses have included industrial activities that may have disposed of wastes at undocumented locations, it is possible that development projects under the Specific Plan could encounter buried wastes during excavation and ground disturbance activities. Furthermore, areas near Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary contain imported fill;³⁰ however, the quality of the fill soils is not documented. Individual sites within portions of the Plan Area that are located further inland may also contain undocumented fill soils. Construction on an undocumented landfill or unknown fill soils could result in structures that are unstable and thereby create a substantial risk to life and property.

As described above, development projects under the Specific Plan would be required to comply with SCA-GEO-2: Soils Report (#38) or SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction) (#40), and with the City's grading, excavations, and fills ordinance (Chapter 18B), both of which require the investigation of development sites prior to construction. Compliance with these existing regulations would enable development projects to identify and address the direct and indirect hazards that could result from construction at a former landfill site or sites with unknown fill soils.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to development projects located above a landfill or unknown fill soils.

(8) Soils Incapable of Adequately Supporting the Use of Septic Tanks or Alternative Wastewater Disposal Systems (Criterion 6)

The Plan Area is located within an urban area where all development would be able to tie into existing wastewater infrastructure. None of the developments would require the use of septic or

³⁰ Graymer et al., 2006. Geologic Map of the San Francisco Bay Region.

other alternative disposal wastewater systems. Therefore, there would be no impact related to use of on-site septic systems.

c. Cumulative Geology and Soils Impacts

Geologic impacts do not extend far beyond a project's boundaries because geologic conditions can vary widely over a short distance. For this reason, potential impacts are typically confined to discrete spatial locations and do not combine to create a significant cumulative impact. The exception to this generalization would occur where a large geologic feature (e.g., fault zone, massive landslide) might affect an extensive area, or where the effects from the adoption and development under the Specific Plan could affect the geology of an off-site location. There are no large landslide features or fault zones present within the Plan Area. Underground BART tracks are located throughout the region; however, any potential ground failure as a result of construction activities located above or near underground BART tracks would be localized to the site where construction is occurring and to adjacent areas, and would not have the potential to contribute to a cumulative impact. Therefore, the cumulative setting for the Specific Plan is the Plan Area and its immediate vicinity.

Potential structural damage from seismic, geologic, and soils hazards from other past, present, and reasonably foreseeable future projects within the cumulative area could combine and result in a potentially significant cumulative impact. The projects that contribute to this potential cumulative impact include but are not limited to those listed in the planned projects around the Plan Area in *Section V.A, Land Use*, of this Draft EIR. Development under the Specific Plan would be required to comply with SCA-GEO-1: Construction-Related Permit(s) (#37), with SCA-GEO-2: Soils Report (#38) or SCA-GEO-3: Seismic Hazards Zone (Landslide/Liquefaction) (#40), and with the California Building Code and Seismic Hazards Zone Mapping Act. Many existing buildings (i.e., past projects) within the Plan Area have been built in accordance with building code requirements for geotechnical and seismic safety in effect at the time of building construction. As present and future projects replace aging infrastructure and older structures with new, more rigorously regulated projects, the potential for seismic risks is incrementally reduced over time. For these reasons, compliance with existing SCAs, regulations, and requirements would ensure that development under the Specific Plan would not make a cumulatively considerable contribution to the potential cumulative impact from seismic, geologic, and soils hazards.

Therefore, cumulative impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to geology, soils, and paleontological resources.

I. HAZARDS AND HAZARDOUS MATERIALS

This section provides an overview of the potential hazards and hazardous materials issues in the Plan Area and vicinity and analyzes how implementation of the Specific Plan and its associated development may affect these conditions. Existing City policies and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified.

1. Setting

This section presents the existing physical conditions pertaining to hazards and hazardous materials within the Plan Area and vicinity including soils and groundwater contamination, hazardous building materials, schools, airports, emergency response and evacuations plans, and wildland files. The Specific Plan policies and City Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified. No additional mitigation was determined necessary.

a. Soil and Groundwater Contamination

As described in the Specific Plan, the first buildings in the Plan Area were constructed in the late 1850s to early 1860s. Land uses in the Plan Area have comprised a variety of uses over a long period of time, including many industrial and commercial activities that, in some cases, may have resulted in spills or leaks of hazardous materials to the ground, resulting in soil and/or groundwater contamination. The Plan Area's urban development has also involved the use of fill materials to create land adjacent to Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary. Non-engineered fill of unknown origin could potentially contain hazardous materials. Hazardous materials may also be present in building materials and released during building demolition activities. If improperly handled, hazardous materials and wastes can cause public health hazards when released to the soil, groundwater, or air. Potential exposure can occur as a result of an accidental release of hazardous materials or hazardous wastes during transportation, storage, or handling, or during the disturbance of contaminated subsurface soil or groundwater.

(1) Overview of Contaminated Sites

In California, the status and location of hazardous materials release sites under regulatory oversight for assessment and/or remediation actions are reported on the State Water Resources Control Board (State Water Board) GeoTracker database and the Department of Toxic Substances Control (DTSC) EnviroStor database. The State Water Board GeoTracker database includes leaking underground storage tanks (LUSTs) and Cleanup Program sites. An active LUST site is undergoing investigation and/or cleanup due to the unauthorized release from an underground storage tank (UST). In addition to known LUST sites, it is not uncommon for older USTs to have been abandoned in place with no documentation of location or abandonment

technique. Cleanup Program sites are undergoing investigation and/or cleanup due to spills and leaks of hazardous materials that were used by various businesses and industries (e.g., dry cleaners), which can include, but are not limited to, heavy metals, solvents, and flammable materials. The DTSC EnviroStor database includes properties such as former industrial sites, school sites, military bases, small businesses, and landfills that are contaminated, or believed contaminated, with some level of toxic substances.

As of February 2018, the State Water Board GeoTracker database¹ records identify 100 LUST sites and 51 Cleanup Program sites within the Plan Area. Of these sites, 14 LUST sites and 28 Cleanup Program sites remain open and under active oversight. There are 18 permitted UST sites within the Plan Area; however, the presence of a UST on a site is not necessarily indicative of a release.

The DTSC EnviroStor database² records identify 8 listed sites within the Plan Area:

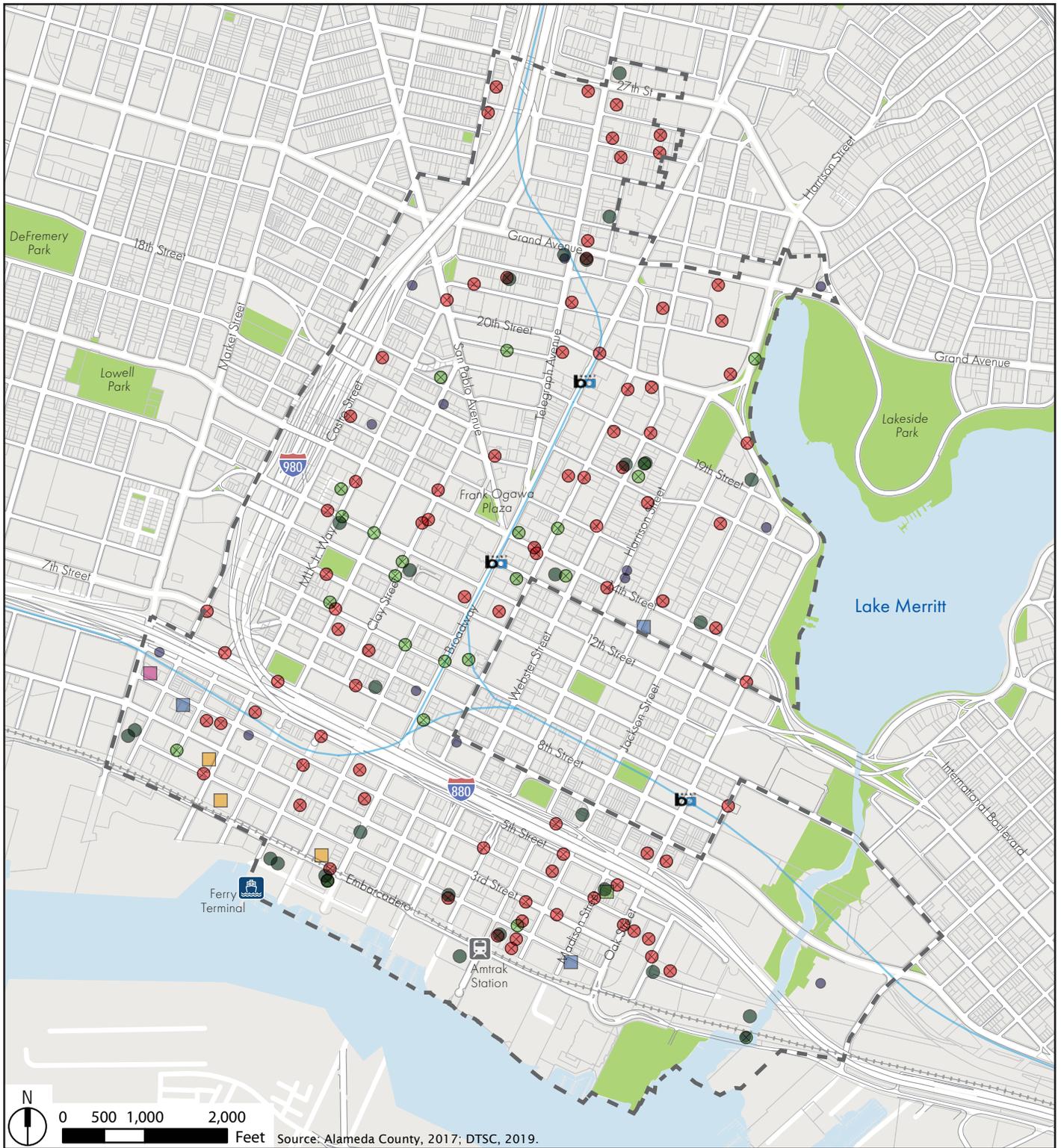
- Three of these sites are State response sites and three are voluntary cleanup sites. State response and voluntary cleanup sites are under DTSC oversight through the Site Mitigation and Restoration Program for brownfields.³
- One DTSC listed site is an evaluation site. This property contains a metal recycling business that has received several violation notices from DTSC and the Alameda County Environmental Health Department and is therefore indicated as requiring evaluation.
- One DTSC listed site is a corrective action site. Corrective action sites are properties that were permitted to handle hazardous wastes under the Resource Conservation and Recovery Act. Cleanup actions on this property have been completed, and current activities at the site include post-remediation maintenance of soil gas mitigation systems and groundwater monitoring.

The locations of the hazardous materials release sites within the Plan Area are shown on Figure V.I-1. There are also numerous LUST sites, Cleanup Program sites, and DTSC cleanup sites in the vicinity of the Plan Area. Sites beyond the Plan Area boundary may have the potential to affect the Plan Area if the contaminants associated with those sites migrate (with groundwater flow) to the Plan Area.

¹ State Water Resources Control Board (SWRCB), 2018. GeoTracker Database. Available at: geotracker.waterboards.ca.gov, accessed February 22, 2019.

² Department of Toxic Substances Control (DTSC), 2018. EnviroStor Database. Available at: www.envirostor.dtsc.ca.gov/public, accessed February 22, 2019.

³ Brownfields are properties that are contaminated and underutilized due to perceived remediation cost and liability concerns.



Legend

- Downtown Plan Boundary
- Parks
- Open Cleanup Program Sites
- Open LUST Sites
- Closed Cleanup Program Sites
- Closed LUST Sites
- DTSC State Response Sites
- DTSC Voluntary Cleanup Sites
- DTSC Evaluation Sites
- DTSC Corrective Action Sites

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**Figure V.I-1
Hazardous Materials Release Sites**

b. Hazardous Building Materials

Hazardous materials are commonly found in building materials (particularly within older buildings) that may be affected during demolition and renovation activities under the Specific Plan. The Plan Area is currently highly developed and includes many older buildings that may have been constructed with hazardous building materials. These materials include lead-based paint, asbestos, and polychlorinated biphenyls (PCBs), and, if disturbed, could present a potential hazard to workers or the public.

Asbestos is a known human carcinogen that was commonly used in building materials until the early 1980s, when its use in the United States began to be phased out.⁴ Asbestos was used to provide strength and fire resistance, and frequently incorporated into insulation, roofing, and siding; textured paint and patching compounds used on wall and ceiling joints; vinyl floor tiles and adhesives; and water and steam pipes. Many existing structures within the Plan Area were constructed earlier than the 1980s.

Prior to 1978, lead compounds were commonly used in exterior and interior paints. Lead is toxic to the kidneys, blood, and heart. It can impair the nervous system, affecting hearing, vision, and muscle control; cause birth defects and sterility; and result in irreversible learning deficits and delayed neurological and physical development in children. The application of lead-based paint on residential structures was banned in 1978; however, lead-based paint can be found on school buildings constructed prior to 1993, and in commercial or industrial structures regardless of construction date.⁵

PCBs were used as coolants and lubricants in transformers, capacitors, heating/cooling equipment, and other electrical equipment, and were also used as plasticizers in paints, plastics, rubber products, and caulking. Although manufacturing of PCBs has been banned in the United States since 1979, they may still be found in older electrical equipment and other building materials such as light ballasts and caulking. PCBs have been demonstrated to cause cancer and a variety of other adverse health effects in animals, including effects on the immune system, reproductive system, nervous system, and endocrine system. Studies in humans support evidence for the potential carcinogenic and non-carcinogenic effects of PCBs.⁶ PCBs and PCB-contaminated items require proper off-site transport and disposal at a facility that can accept such wastes.

⁴ California Code of Regulations, Title 8 Industrial Relations, Section 5208 Asbestos.

⁵ Department for Toxic Substances Control (DTSC), 2006. Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers, Revised June 9.

⁶ U.S. Environmental Protection Agency (EPA), 2018a. Learn about Polychlorinated Biphenyls (PCBs). Updated September 15. Available at: <https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs>, accessed February 22, 2019.

Fluorescent lighting tubes and ballasts, computer displays, and several other common items containing hazardous materials (including mercury, a heavy metal) are regulated as “universal wastes” by the State of California. Universal waste regulations allow common, low-hazard wastes to be managed under less stringent requirements than other hazardous wastes. Management of other hazardous wastes is governed by DTSC hazardous waste rules.

c. Schools

Children are more susceptible to adverse health effects from hazardous materials than the general population. The following schools are located within the Plan Area:

- Oakland School for the Arts (530 18th Street)
- Envision Academy for Arts & Technology (1515 Webster Street)
- Smalltrans Depot Daycare (111 Grand Avenue)
- Little Stars Preschool (169 14th Street)
- New Day Preschool and Learning Center (460 West Grand Avenue)
- Starlight Child Development Center (246 14th Street)
- Laney Children’s Center (286 East 10th Street)
- Bright Future Early Learning (1515 Clay Street)

The following schools are located within a ¼-mile of the Plan Area:

- Metwest High School (314 East Tenth Street)
- American Indian Public Charter School (171 12th Street)
- Lincoln Elementary School (225 11th Street)
- Martin Luther King Jr. Elementary School (960 10th Street)
- Dewey Academy (1111 2nd Avenue)
- West Oakland Middle School (991 14th Street)
- St. Vincent’s Day Home (1086 8th Street)
- East Bay Academy (1011 7th Avenue)
- Early Head Start (2619 Broadway)

d. Airports

Aviation safety hazards can result if projects are sited in the vicinity of airports. The nearest public airport to the Plan Area is Oakland International Airport, located approximately 4 miles southeast

of the Plan Area.⁷ The Plan Area is not located within the Oakland International Airport influence area.⁸ There are no private airstrips in the vicinity.

e. Emergency Response and Evacuation Plans

As stated in the Safety Element of the City's General Plan,⁹ the City of Oakland has adopted the Standardized Emergency Management System (SEMS), a framework for standardizing emergency response procedures in California to facilitate the flow of information and resources among multiple agencies. The Oakland Office of Emergency Services' SEMS emergency plan describes how City agencies would respond to declared emergencies in the City.

In addition to the SEMS emergency plan, other plans governing emergency response operations include:¹⁰

- Office of Emergency Services and citywide Power Outages: Response Concept of Operations.
- Oakland Metropolitan Medical Response System Plan.
- Alameda County Multi-Casualty Medical Response Plan.
- Alameda County Oil Spill Response Plan.
- Emergency operations plans for the Oakland Unified School District, East Bay Municipal Utility District, Lawrence Berkeley Laboratory, Alameda County Transit, and Bay Area Rapid Transit.

The City of Oakland has installed a network of outdoor warning sirens to alert the public in the case of emergencies. The sirens' sound range is approximately 1 mile. In the Plan Area, there is a siren located near the I-980 and I-880 highway interchange, at the intersection of Martin Luther King Junior Way and 10th Street. There is also a siren located at the intersection of East 12th Street and 6th Avenue, approximately 0.15 miles from the eastern edge of the Plan Area. These sirens would be audible through some portions of the Plan Area but not the entire Plan Area.

The Safety Element maps evacuation routes for the city of Oakland. Many of these routes cross the Plan Area, including the following streets within the Plan Area: Lakeside Drive, Harrison

⁷ Federal Aviation Administration (FAA), 2019. Airport Data and Contact Information. Available at: https://www.faa.gov/airports/airport_safety/airportdata_5010/, accessed January 24, 2019.

⁸ Alameda County Community Development Agency, 2010. Oakland International Airport, Airport Land Use Compatibility Plan, December. Available at: https://www.acgov.org/cda/planning/generalplans/documents/OAK_ALUCP_122010_FULL.pdf, accessed January 24, 2019.

⁹ City of Oakland, 2004. Protect Oakland: City of Oakland General Plan, Safety Element, November. Amended 2012.

¹⁰ Ibid.

Street, Broadway, Telegraph Avenue, San Pablo Avenue, Martin Luther King Junior Way, Market Street, 7th Street, 12th Street, 14th Street, Grand Avenue, and 27th Street.

f. Wildland Fires

The Plan Area is entirely urbanized land. California Department of Forestry and Fire Protection (CAL FIRE) maps identify fire hazard severity zones in State and local responsibility areas for fire protection. The Plan Area is not located within or near a very high or high fire hazard severity zone for either State or local responsibility areas.^{11,12}

2. Regulatory Framework

The proper management of hazardous materials is a common concern for all communities. Beginning in the 1970s, governments at the federal, State, and local levels became increasingly concerned about the effects of hazardous materials on human health and the environment. Numerous laws and regulations were developed to investigate and mitigate these effects. As a result, the storage, use, generation, transport, and disposal of hazardous materials is highly regulated by federal, State, and local agencies. Aviation hazards are highly regulated by federal agencies. These agencies, as well as the laws, regulations, and programs they administer, are summarized below.

a. Federal

Four federal agencies have roles in the regulation of hazardous materials and aviation hazards that may occur within the Plan Area.

- **U.S. Environmental Protection Agency.** The U.S. Environmental Protection Agency (EPA) is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials and hazardous waste. The federal regulations are primarily codified in Title 40 of the Code of Federal Regulations. The legislation includes the Resource Conservation and Recovery Act of 1976, the Superfund Amendments and Reauthorization Acts of 1986, and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. The EPA provides oversight for site investigation and remediation projects, and has developed protocols for sampling, testing, and evaluating solid wastes¹³.

¹¹ CAL FIRE, 2007. Fire Hazard Severity Zones in SRA, Alameda County, November 7.

¹² CAL FIRE, 2008. Very High Fire Hazard Severity Zones in LRA, Alameda County, September 3.

¹³ U.S. Environmental Protection Agency (EPA), 2018b. The SW-846 Compendium. Available at: <https://www.epa.gov/hw-sw846/sw-846-compendium>, accessed February 22, 2019.

- **Occupational Health and Safety Administration.** The Occupational Health and Safety Administration (OSHA) is the federal agency responsible for enforcing and implementing federal laws and regulations pertaining to worker health and safety. OSHA's Hazardous Waste Operations and Emergency Response regulations require training and medical supervision for workers at hazardous waste sites. Additional regulations have been developed regarding exposure to lead and asbestos to protect construction workers and are enforced through the California Division of OSHA, described below.
- **U.S. Department of Transportation.** The U.S. Department of Transportation (DOT) is responsible for enforcement and implementation of federal laws and regulations regarding the transportation of hazardous materials. Parts 100-1085 of Title 49 Code of Federal Regulations cover most hazardous materials transportation regulations. These include regulations for permitting, training, labeling, and placarding.
- **Federal Aviation Administration.** The Federal Aviation Administration is responsible for promoting air safety and the efficient use of navigable airspace. In accordance with Title 14 Code of Federal Regulations Part 77, the Federal Aviation Administration requires 45-day notice prior to the start of construction for any development that could affect airspace, including any structure exceeding 200 feet above ground level.

b. State

The State Agencies described below regulate hazardous materials and waste that may occur within the Plan Area.

- **California Environmental Protection Agency.** The California Environmental Protection Agency (CalEPA) implements and enforces environmental laws that regulate air, water and soil quality, pesticide use and waste recycling and reduction. Departments within CalEPA include DTSC, State Water Board, and California Air Resources Board, described below.
- **Department of Toxic Substances Control.** In California, the DTSC is authorized by the EPA to enforce and implement federal hazardous materials laws and regulations. California regulations pertaining to hazardous materials are equal to or exceed the federal requirements. Most State hazardous materials regulations are contained in Title 22 of the California Code of Regulations (CCR). The DTSC generally acts as the lead agency for soil and groundwater cleanup projects, primarily involving heavy metals, that affect public health, and establishes cleanup levels for subsurface contamination that are equal to or more restrictive than federal levels. The DTSC has also developed land disposal restrictions and treatment standards for hazardous waste disposal in California.
- **State Water Resources Control Board.** The State Water Board enforces regulations pertaining to USTs as outline in Title 23 of CCR and Chapter 6.7 of Health and Safety Code. It also allocates monies to eligible parties that request reimbursement of funds to clean up soil

and groundwater pollution from UST leaks. The State Water Board also enforces the Porter-Cologne Water Quality Act through its nine Regional Water Quality Control Boards (RWQCBs), including the San Francisco Bay RWQCB, described below.

- **California Air Resources Board.** The California Air Resources Board is responsible for coordination and oversight of State and local air pollution control programs in California, including implementation of the California Clean Air Act of 1988. The California Air Resources Board has developed State air quality standards and is responsible for monitoring air quality in conjunction with the local air districts.
- **California Office of Emergency Services.** The Office of Emergency Services State Warning Point acts as the Governor's 911 Dispatch Center. The State Warning Point, under federal SARA Title III requirements, must be notified as soon as possible of spills and releases of hazardous substances exceeding Emergency Planning and Community Right-to-Know Act minimal reportable quantities. The Office of Emergency Services compiles Statewide statistics on spills and releases, and will dispatch other regional, State, and federal agencies to the scene, if necessary.
- **California Occupational Safety and Health Administration.** Worker health and safety is regulated at the federal level by the OSHA. The Federal Occupational Safety and Health Act of 1970 authorizes the states to establish their own safety and health programs with OSHA approval. In California, worker health and safety protections are regulated by the California Occupational Safety and Health Administration (Cal/OSHA), which also provides consultant assistance to employers. California standards for workers dealing with hazardous materials are contained in Title 8 of the CCR and include practices for all industries (General Industrial Safety Orders), with specific practices for construction and other industries. Workers at hazardous waste sites (or workers who may be exposed to hazardous wastes that might be encountered during excavation of contaminated soils) must receive specialized training and medical supervision according to the Hazardous Waste Operations and Emergency Response regulations (8 CCR Section 5192). Additional regulations have been developed for construction workers potentially exposed to lead (8 CCR Section 1532.1) and asbestos (8 CCR Section 1529). Cal/OSHA enforcement units conduct on-site evaluations and issue notices of violation to enforce necessary improvements to health and safety practices.
- **California Highway Patrol and California Department of Transportation.** The DOT regulates hazardous materials transportation on all interstate roads. Within California, the State agencies with primary responsibility for enforcing federal and State regulations, and for responding to transportation emergencies, are the California Highway Patrol and California Department of Transportation (Caltrans). Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for

transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.

c. Regional

The following regional agencies have regulatory authority over the management of hazardous materials and waste within the Plan Area.

- **San Francisco Bay Regional Water Quality Control Board.** The nine regional boards, including the San Francisco Bay RWQCB, provide for protection of State waters in accordance with the Porter-Cologne Water Quality Act of 1969. The RWQCB can act as lead agency to provide oversight of sites where the quality of groundwater or surface waters is threatened, and has the authority to require investigations and remedial actions. The RWQCB also developed Environmental Screening Levels to help expedite the preparation of environmental risk assessments at sites where contaminated soil and groundwater have been identified.¹⁴
- **Bay Area Air Quality Management District.** The Bay Area Air Quality Management District (BAAQMD) has primary responsibility for control of air pollution from sources other than motor vehicles and consumer products (which are the responsibility of the EPA and the CARB). The BAAQMD is responsible for preparing attainment plans for nonattainment criteria pollutants, control of stationary air pollutant sources, and management of volatile organic compound (VOC)-containing soils (District Rule 8-40). Section 19827.5 of the California Health and Safety Code requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. The BAAQMD is responsible for the issuance of permits for activities that include asbestos demolition and renovation activities (District Regulation 11, Rule 2).
- **Alameda County Department of Environmental Health.** Alameda County Department of Environmental Health (ACDEH) is the primary agency responsible for local enforcement of State and federal laws pertaining to hazardous materials and hazardous waste management. In the City of Oakland, the ACDEH is the Certified Unified Program Agency, responsible for coordination of the following programs: Hazardous Materials Business Plan Program, Hazardous Waste Generator Program, UST Program, California Accidental Release Prevention Program, Tiered Permitting Program, and Aboveground Petroleum Storage Act.¹⁵

¹⁴ Regional Water Quality Control Board (RWQCB), 2019. Environmental Screening Levels, Interim Final, January. RWQCB San Francisco Bay Region. Available at: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml, accessed February 22, 2019.

¹⁵ Alameda County Environmental Health (ACEH), 2018a. Hazardous Materials/Waste Program Certified Unified Program Agency (CUPA). Available at: <https://www.acgov.org/aceh/hazard/index.htm>, accessed February 22, 2019.

The ACDEH also provides regulatory oversight for investigation and cleanup of leaking underground fuel tank sites and spills, leaks, investigation, and cleanup sites.¹⁶

d. City of Oakland

The Fire Prevention Bureau is responsible for ensuring that hazardous materials are safely stored per California Fire Code, CCR Title 24. These regulations address fire prevention, fire protection, safe storage, and use of hazardous materials. The Fire Prevention Bureau issues a Fire Code Permit when facilities have demonstrated their compliance with California Fire Code regulations. A Hazardous Materials Management Plan (HMMP) is required for storage of hazardous materials that meet the permit requirements, as defined in Section 105 of CCR Title 24. The following section summarizes relevant hazards and hazardous materials- related policies and standards from the General Plan and SCAs.

(1) General Plan

The Safety Element of the City of Oakland General Plan¹⁷ contains the following policies and action items related to hazardous materials:

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.

- Action HM-1.1: Continue to exercise unified-program responsibilities, including the issuance of permits for and inspection of certain industrial facilities, monitoring the filing of disclosure forms and risk-management plans, hazardous-materials assessment reports and remediation plans, and closure plans by such facilities.
- Action HM-1.2: Continue to enforce provisions under the zoning ordinance regulating the location of facilities which use or store hazardous materials.
- Action HM-1.3: Consider adopting a health and safety protection overlay zone or set of procedures to ensure that new activities which use or store hazardous materials on a regular basis near residential zones do not endanger public health or the environment.
- Action HM-1.4: Continue to participate in the Alameda County Waste Management Authority and, as a participant, continue to implement policies under the county's hazardous-waste management plan to minimize the generation of hazardous wastes.
- Action HM-1.5: Continue to implement the city's household hazardous-waste element (including educating residents about waste-disposal options and the consequences of illegal disposal) in

¹⁶ Alameda County Environmental Health (ACEH), 2018b. Local Oversight Program. Available at: <https://www.acgov.org/aceh/lop/index.htm>, accessed February 22, 2019.

¹⁷ City of Oakland, 2004. Protect Oakland: City of Oakland General Plan, Safety Element, November. Amended 2012.

order to reduce the generation of household hazardous waste and the amount of such waste that is disposed inappropriately.

- Action HM-1.6: Through the Urban Land Redevelopment program, and along with other participating agencies, continue to assist developers in the environmental cleanup of contaminated properties.
- Action HM-1.7: Create and maintain a database with detailed site information on all brownfields and contaminated sites in the city.

Policy HM-2: Reduce the public's exposure to toxic air contaminants through appropriate land use and transportation strategies.

- Action HM-2.1: Continue to enforce performance standards controlling the emission of air contaminants, particulate matter, smoke and unpleasant odors.
- Action HM-2.2: Continue to discourage the development of sensitive receptors adjacent to significant sources of air contaminants and encourage industry to adopt best-available control technologies to reduce air contaminants.
- Action HM-2.3: Continue to support the efforts of the Bay Area Air Quality Management District's air-toxics program, including the review and permitting of stationary sources, identification of emitting facilities, promulgation of categorical control measures, and monitoring and inventory of emissions.

Policy HM-3: Seek to prevent industrial and transportation accidents involving hazardous materials, and enhance the city's capacity to respond to such incidents.

- Action HM-3.1: Continue to enforce regulations limiting truck travel through certain areas of the city to designated routes, and consider establishing time based restrictions on truck travel on certain routes to reduce the risk and potential impact of accidents during peak traffic hours.
- Action HM-3.2: Continue to support the prohibition of trucks on I-580 through Oakland.
- Action HM-3.3: Support state and federal legislative efforts that seek to increase the safety of transporting hazardous materials.
- Action HM-3.4: Continue to rely on, and update, the city's hazardous materials area plan to respond to emergencies related to hazardous materials.
- Action HM-3.5: Continue to offer basic emergency-response education and training to local businesses.

Policy PS-1: Maintain and enhance the city's capacity to prepare for, mitigate, respond to, and recover from disasters and emergencies.

It should be noted that Action HM-1.1 above is out of date, as ACEH has assumed the Certified Unified Program Agency responsibilities for the City of Oakland.

The following policy statements from the Open Space, Conservation, and Recreation Element of the General Plan¹⁸ are related to hazardous materials:

Policy CO-1.2: Soil Contamination and Hazards. Minimize hazards associated with soil contamination through the appropriate storage and disposal of toxic substances, monitoring of dredging activities, and clean-up of contaminated sites. In this regard, require soil testing for development of any site (or dedication of any parkland or community garden) where contamination is suspected due to prior activities on the site.

Policy REC-4.2: Environmental Responsibility. Encourage maintenance practices which conserve energy and water, promote recycling, and minimize harmful side effects on the environment. Ensure that any application of chemical pesticides and herbicides is managed to avoid pollution of ground and surface waters.

(2) Estuary Policy Plan

The Estuary Policy Plan¹⁹ overlaps with the Plan Area where it extends south of I-880. The Estuary Policy Plan includes the following policy:

Policy OAK-1.3: Undertake remediation of contaminants in conjunction with development and/or improvement of relevant sites. Typical of many waterfront areas that have historically been in intensive industrial use, contamination has been documented within this district. It will be a consideration in redevelopment of the sites identified. To date, parties have undertaken initial efforts to characterize surface soil, subsurface soil and groundwater within the Oak to Ninth area. Further investigations should be undertaken to more accurately characterize contamination, and to determine the most appropriate and cost effective remediation methods that can achieve reuse objectives for this area in a timely and coordinated fashion. The level and type of soil and groundwater cleanup should be commensurate with the recommended re-use of the affected sites.

(3) Vegetation Management Plan

The City of Oakland has drafted a Vegetation Management Plan²⁰ that evaluates the specific wildfire hazard factors in the City's very high fire hazard severity zone and establishes a framework for managing vegetative fuel loads on City-owned properties and along roadways, such that wildfire hazard is reduced and negative environmental effects resulting from vegetation management activities are avoided or minimized. The Plan Area is located more than two miles from the nearest areas subject to the requirements of the Vegetation Management Plan.

¹⁸ City of Oakland, 1996. Open Space, Conservation, and Recreation (OSCAR): An Element of the Oakland General Plan, June.

¹⁹ City of Oakland and Port of Oakland, 1999. Estuary Policy Plan, June.

²⁰ Oakland Fire Department, 2018. Draft Vegetation Management Plan, City of Oakland, California, May.

(4) Municipal Code

Oakland Municipal Code, Title 8 Section 42.105 addresses hazardous materials regulated under Section 44321 of the California Health and Safety Code. These materials have the potential to impact air quality through the release of organic gases, particulates, or oxides of nitrogen and sulfur that could be toxic. To protect sensitive receptors from the public health effects that could result from a release of these substances, the Oakland Municipal Code, Title 8 Section 42.105 allows the City, at its discretion, to require facilities that handle hazardous materials regulated under Section 44321 of the California Health and Safety Code within 1,000 feet of a residence, school, hospital, or other sensitive receptor to prepare a Hazardous Materials Assessment Report and Remediation Plan (HMARRP).

The HMARRP must include public participation in the planning process, along with the following requirements:

- Identify hazardous materials used and stored at the property and the suitability of the site;
- Analyze off-site consequences that could occur as a result of a release of hazardous materials (including fire);
- Include a health risk assessment; and
- Identify remedial measures to reduce or eliminate on-site and off-site hazards.

(5) Standard Conditions of Approval

The City's SCAs that are relevant to hazards and hazardous materials are listed below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-HAZ-1: Hazardous Materials Related to Construction (#43)

Applicable To: All projects involving construction activities.

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 manufacturer'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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44)

Applicable To: All projects involving (a) redevelopment or change of use of a historically industrial or commercial site; (b) a contaminated site as identified in City records; or (c) a site listed on the State Cortese List; and site remediation activities are required based on an environmental site assessment. Note that the environmental site assessment referenced in this condition is typically required prior to project approval.

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.

When Required: Prior to approval of demolition, grading, or building permits

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Applicable regulatory agency with jurisdiction

Monitoring/Inspection: Applicable regulatory agency with jurisdiction

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

d. Best Management Practices (BMPs) Required for Contaminated Sites

Requirement: The project applicant shall ensure that 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-HAZ-3: Hazardous Materials Business Plan (#45)

Applicable To: All projects involving the handling, storage, or transportation of hazardous materials during business operations.

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.

When Required: Prior to building permit final

Initial Approval: Oakland Fire Department

Monitoring/Inspection: Oakland Fire Department

Other SCAs relevant to the hazards that could be encountered within the Plan Area are SCA-AIR-7: Asbestos in Structures (#27), which addresses impacts related to the release of asbestos during the demolition and renovation of structures, and is listed in *Section V.C, Air Quality*; SCA-HYD-3: State Construction General Permit (#50), which requires projects that disturb more than one acre to comply with the requirements of the Construction General Permit, and is listed in *Section V.J, Hydrology and Water Quality*; and SCA-TRANS-2: Construction Activity in the Public Right-of-Way (#76), which requires project applicants to obtain an obstruction permit and develop a traffic control plan prior to placing any construction-related obstruction in the public right of way, and is listed in *Section V.B, Transportation and Traffic*.

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section describes the impacts related to hazardous materials that could result from implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years. The section begins with the criteria of significance that establish the thresholds for determining whether an impact is significant. The latter part of this section presents potential impacts and identifies SCAs and/or mitigation measures to address these impacts, as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would result in a significant hazard and hazardous materials impact on the environment 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.²¹ [NOTE: Per the BAAQMD CEQA Guidelines, evaluate whether the proposed Plan would result in persons being within the Emergency Response Planning Guidelines exposure level 2 for acutely hazardous air emissions either by siting a

²¹ Per the BAAQMD CEQA Guidelines, evaluate whether the project would result in persons being within the Emergency Response Planning Guidelines 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.

new source or a new sensitive receptor. For this threshold, sensitive receptors include residential uses, schools, parks, daycare centers, nursing homes, and medical centers.]

4. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school.
5. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 (i.e., the "Cortese List") and, as a result, 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 2 miles of a public airport or public use airport, and result in a significant safety hazard for people residing or working in the project area.
8. Be located within the vicinity of a private airstrip, and 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.
10. Expose people or structures, either 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.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Analysis and Findings

The Specific Plan would facilitate development and growth within the Plan Area. The potential impacts that are identified are analyzed within the context of existing plans and policies, permitting requirements, local ordinances, and the City of Oakland's SCAs. Impacts that would be substantially reduced or eliminated by compliance with these policies or requirements are found to be less than significant.

(1) Transport, Use, or Disposal of Hazardous Materials (Criteria 1, 2, 3, and 5)

Operational Hazardous Materials Transport, Use, and Disposal

The land uses proposed under the Specific Plan are primarily mixed-use residential, commercial, and office, with some flex industry uses that would allow for light industrial and production spaces, as shown in *Chapter III, Project Description*, Figure III-4, Land Use Character. Under these proposed land uses, the primary hazardous materials used would be those commercially available for routine maintenance and landscaping (e.g., paint and cleaning supplies, pesticides). However, some commercial businesses (e.g., dry cleaners) and flex industry uses could use substantial quantities of hazardous materials. Improper handling and accidents involving these substances could expose workers, the public, and the environment to hazardous materials.

The use, transportation, storage, and disposal of hazardous materials are subject to the oversight of federal, State, regional and local agencies, as described in the Regulatory Framework above. Hazardous materials transported to and from the Plan Area would be subject to regulations enforced by the DOT, California Highway Patrol, and Caltrans, including driver-training requirements, load labeling procedures, and container specifications. Projects involving businesses and industries that handle hazardous materials greater than or equal to 55 gallons for a liquid, 500 pounds for a solid, 200 cubic feet for a compressed gas, or greater than threshold planning quantities of an extremely hazardous substance, would be subject to the Hazardous Material Business Plan Program administered by Alameda County Department Environmental Health. Individual projects within the Plan Area would be required to comply with SCA-HAZ-3: Hazardous Materials Business Plan (#45) which requires projects that use, handle, or store hazardous materials to develop and implement a project-specific Hazardous Materials Business Plan. The Hazardous Materials Business Plan would specify hazardous materials storage, personnel training, and personal protective equipment requirements; disposal procedures; and spill response measures in the case of accidental spills. Projects which meet the permit requirements for storage of hazardous materials as outlined in Section 105 of CCR Title 24 would be subject to Hazardous Materials Management Plan administered by City of Oakland Fire Department. Individual projects within the Plan Area would be required to comply with SCA-HAZ-4: Hazardous Materials Management Plan (#45).

Businesses generating any amount of hazardous waste would be subject to the Hazardous Waste Generator Program administered by ACDEH, which requires the proper handling, recycling, treating, storing, and disposing of hazardous wastes. Any business or industry handling extremely hazardous substances at or above threshold planning quantities would be subject to the California Accidental Release Prevention Program. This program requires businesses that handle more than threshold quantities of an acutely hazardous material to develop a Risk

Management Plan to prevent or mitigate releases that could have off-site consequences through hazard identification, planning, source reduction, maintenance, training, and engineering controls. Additionally, Oakland Municipal Code, Title 8 Section 42.105 authorizes the City of Oakland to require businesses that handle hazardous materials regulated under Section 44321 of the California Health and Safety Code within 1,000 feet of a sensitive receptor to submit a HMARRP to identify remedial measures that would reduce or eliminate on-site and off-site hazards to the public. Implementation of the City of Oakland SCAs, in conjunction with compliance with existing regulations, would minimize the potential of workers, the public, and the environment to be exposed to hazards from the transport, use, and disposal of hazardous materials during project operation. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to transport, use, or disposal of hazardous materials.

Release of Hazardous Materials Used During Construction

Construction of projects under the Specific Plan would involve the use and transport of hazardous materials. These materials could include fuels, oils, paints and other chemicals used during construction activities. Handling and transportation of hazardous materials could result in accidental releases or spills and associated health risks to workers, the public, and environment.

As described above, hazardous materials transported to and from the Plan Area would be subject to regulations enforced by the DOT, California Highway Patrol, and Caltrans. Workers who handle hazardous materials would be required to adhere to health and safety requirements enforced by the federal OSHA and Cal/OSHA. Additionally, the use of hazardous materials on construction sites within the Plan Area would be subject to SCA-HAZ-1: Hazardous Materials Related to Construction (#43), which requires that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health which could occur as a result of hazardous materials handling and storage.

Additionally, projects that disturb over 1 acre of land would be required to comply with the Construction General Permit issued by the State Water Board under Order 2009-0009-DWQ. The Construction General Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer. A SWPPP identifies all potential pollutants and their sources, including construction materials and contaminated soil, and includes a list of BMPs to reduce discharges of construction-related stormwater pollutants. A SWPPP also defines proper building material staging areas, paint, and concrete washout areas; outlines proper equipment/vehicle fueling and maintenance practices; controls equipment/vehicle washing and allowable non-stormwater discharges; and includes a spill prevention and response plan. Under existing programs, the project applicant must submit evidence of compliance with

Construction General Permit requirements to the City, in accordance with SCA-HYD-3: State Construction General Permit (#50). Existing regulations and SCAs require measures to prevent the release of hazardous materials used during construction. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to release of hazardous materials used during construction.

Hazardous Building Materials

Because the Plan Area contains many buildings constructed prior to the 1970s, building demolition debris could contain hazardous materials. The level of potential impact is dependent upon the age, construction, and building materials in each building. Exposure to hazardous building materials could result in a potential impact to workers, the public, and the environment.

Projects constructed under the Specific Plan would be required to comply with SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), which requires project applicants to submit a comprehensive assessment report to the Bureau of Building, signed by a qualified environmental professional, documenting the presence or lack thereof of ACMs, lead-based paint, 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 must 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 must implement the approved recommendations and submit to the City of Oakland evidence of approval for any proposed remedial action and required clearances by the applicable local, State, or federal regulatory agency.

Additionally, projects developed under the Specific Plan would be required to comply with SCA-AIR-7: Asbestos in Structures (#27), which requires the project applicant to comply with all applicable laws and regulations regarding demolition and renovation of ACMs, including but not limited to the California Code of Regulations Title 8; California Business and Professions Code Division 3; California Health and Safety Code Sections 25915-25919.7; and BAAQMD Regulation 11, Rule 2, as may be amended. Evidence of compliance must be submitted to the City of Oakland upon request. In addition, all projects would be required to properly handle and dispose of electrical equipment, lighting ballasts and other building materials that may be identified to contain PCBs in accordance with the Toxic Substances Control Act and other federal and State regulations. Workers who may encounter hazardous building materials would be required to adhere to health and safety requirements enforced by the federal OSHA and Cal/OSHA.

Existing regulations and SCAs require measures to identify hazardous buildings materials and prevent the release of these materials to the environment. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to hazardous building materials.

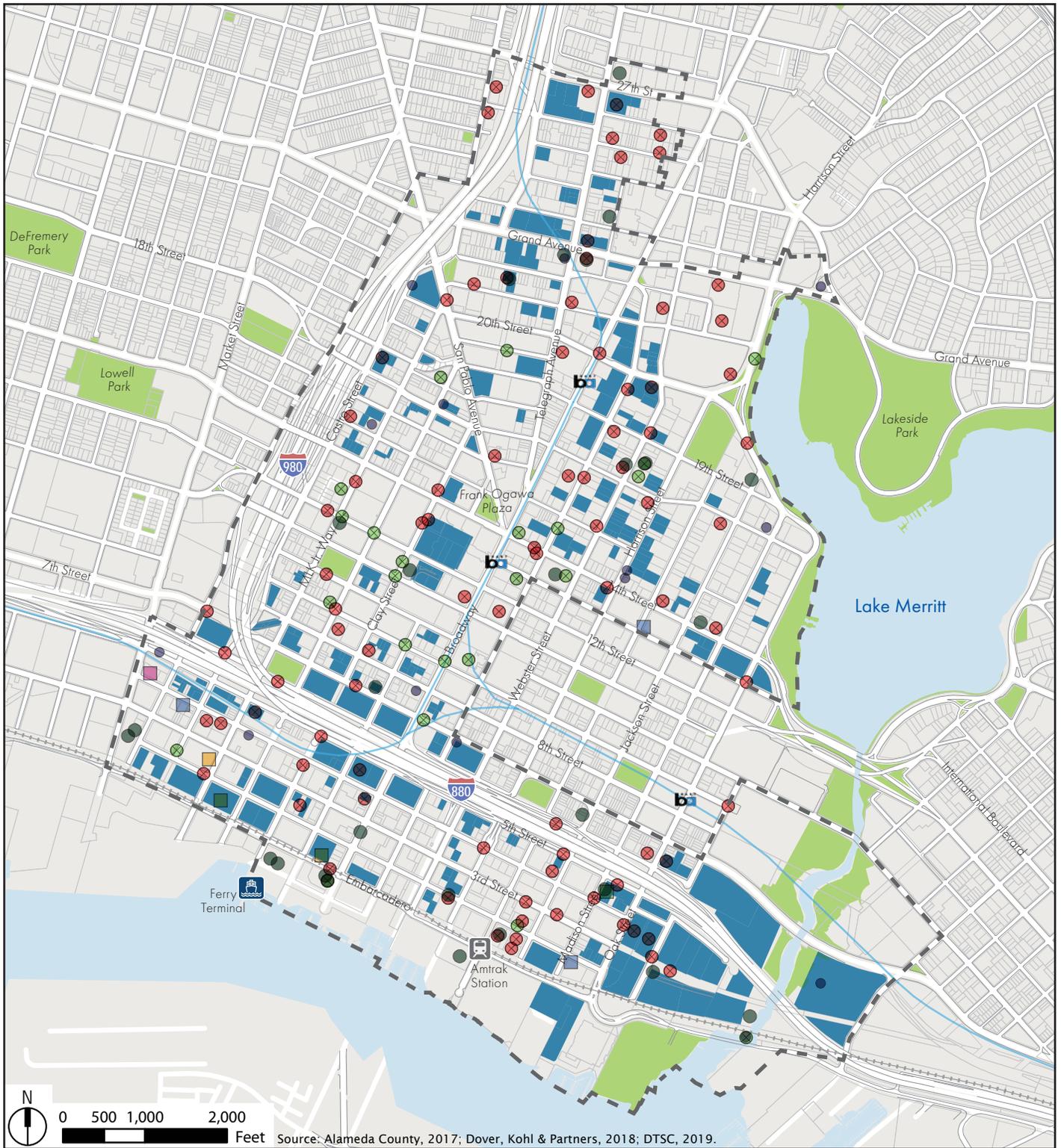
Hazardous Materials Contamination in Soil and Groundwater

The provisions of California Government Code Section 65962.5 require the State Water Board, DTSC, California Department of Health Services, and California Department of Resources Recycling and Recovery to submit information to the CalEPA pertaining to sites that were associated with solid waste disposal, hazardous waste disposal, and/or hazardous materials releases. The compilation of hazardous materials release sites that meet criteria specified in Section 65962.5 of the California Government Code is known as the Cortese List. As described in the Setting section, the Plan Area contains numerous LUST sites, which are on the Cortese List. As part of the Specific Plan process, development opportunity sites were identified and mapped. The development opportunity sites include:

- Infill sites, which are vacant land (including surface parking).
- Underutilized sites, or sites with buildings that could better contribute to the public realm.

Figure V.I-2 shows the locations of sites with known contamination relative to the identified development opportunity sites within the Plan Area. Undocumented fill may also be present within the Plan Area, particularly at locations near Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary, and could contain contaminated materials. Because the Plan Area has included industrial and commercial uses as early as the 1850s and 1860s, and because many areas may be underlain by potentially contaminated fill, soil or groundwater, contamination from either on-site or off-site sources may be present at all development opportunity sites within the Plan Area. The disturbance of contaminated soil during construction activities could expose workers, the public, and the environment to contaminants.

Projects developed under the Specific Plan would be required to comply with SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), which requires all projects located on sites with known or potential contamination to complete a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report, if warranted by the Phase I report. Project applicants are then required to submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, State, or federal regulatory agency. The project applicant would be required to submit a Health and Safety Plan for the review and approval by the City and implement the approved plan to protect project construction workers from risks associated with hazardous materials. The project applicant would also be required to ensure that BMPs are implemented by the contractor during construction to ensure that contaminated soil and groundwater are safely contained, adequately profiled



Legend

- Downtown Plan Boundary
- Parks
- Opportunity Sites
- Open LUST Sites
- Closed LUST Sites
- DTSC State Response Sites
- DTSC Voluntary Cleanup Sites
- DTSC Corrective Action Sites
- BART Station
- BART Line
- Railroad
- Open Cleanup Program Sites
- Closed Cleanup Program Sites

Downtown Oakland Specific Plan EIR

Figure V.I-2
Hazardous Materials Release Sites and Opportunity Sites

(sampled), and properly treated, reused, or disposed in accordance with all applicable local, State, and federal requirements. If suspected soil and groundwater contamination is encountered unexpectedly during construction of a project under the Specific Plan, SCA-HAZ-1: Hazardous Materials Related to Construction (#43), requires the project contractor to cease work in the vicinity of the suspected contamination and notify the City and applicable regulatory agency(ies), and to complete investigation and remediation as appropriate under SCA-HAZ-2. Work cannot resume until all corrective measures been implemented under the oversight of the City or other regulatory agency. These measures would minimize potential hazards related to contaminated soil and groundwater. Workers who may encounter contaminated soils and groundwater would be required to adhere to health and safety requirements enforced by the federal OSHA and Cal/OSHA.

SCA-HAZ-1: Hazardous Materials Related to Construction (#43) and SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44) require site investigation prior to construction; notification of the City and applicable regulatory agencies if unexpected contamination is encountered; completion of all remedial actions required by the applicable regulatory oversight agency; and implementation of a health and safety plan and BMPs to protect workers, the public, and the environment from the risks associated with the disturbance and handling of contaminated soil and groundwater. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to hazardous materials contamination in soil and groundwater.

(2) Hazardous Emissions within ¼-Mile of Schools (Criterion 4)

As described in the Setting section, there are eight schools located within the Plan Area and an additional nine schools located within a ¼-mile of the Plan Area. Most of the Plan Area north of 10th Street, as well as the Plan Area near the Lake Merritt Channel north of the I-880 highway, is located within a ¼-mile of a school.

As previously discussed, hazardous materials used during construction and operation would be managed in accordance with applicable laws and regulations, as well as SCA-HAZ-3: Hazardous Materials Business Plan (#45), SCA-HAZ-1: Hazardous Materials Related to Construction (#43), SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), SCA-HYD-3: State Construction General Permit (#50), and SCA-AIR-7: Asbestos in Structures (#27). Compliance with existing laws, regulations, and SCAs would ensure that schools would not be exposed to emissions from the transport, use, and disposal of hazardous materials during construction and operation of projects within the Plan Area. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to hazardous emissions within a ¼-mile of schools.

(3) Aviation Hazards (Criteria 7 and 8)

As described in the Setting section, the Plan Area is not within the boundaries of a public airport land use plan influence area, within 2 miles of a public use airport or located within the vicinity of a private airstrip.²² Oakland International Airport is the closest airport to the Plan Area, and is approximately 5 miles to the southwest. Due to the distance from the nearest airport, people within the Plan Area would not be exposed to a safety hazard or to excessive levels of noise from airplanes.

The Specific Plan would allow for unlimited building heights in some portions of the Plan Area. In areas where restrictions on building heights would be in place, the maximum allowable heights range from 45 feet to 450 feet. Buildings more than 200 feet tall could potentially obstruct airspace, resulting in an aviation hazard. Any project proposing a structure greater than 200 feet tall would be required to submit a notice to the Federal Aviation Administration through completion of Form 7460-1, Notice of Proposed Construction or Alteration, as required by Title 14 Code of Federal Regulations Part 77. Through this notification, the Federal Aviation Administration would review the project to ensure that it would not pose a hazard to air navigation.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to aviation hazards.

(4) Insufficient Emergency Access Along Streets, and Interference with Emergency Response and Evacuation Plans (Criteria 6 and 9)

The Specific Plan indicates that the majority (more than 80 percent) of streets in the Plan Area have excess vehicle capacity. As a result, the Specific Plan supports the expansion of different modes of transportation within the Plan Area. Such an expansion would be facilitated by the conversion of one-way streets with excess capacity to two-way streets. The Specific Plan indicates that these changes could be made without compromising access and circulation for emergency vehicles. Policy M-3.4 of the Specific Plan specifically prioritizes the movement of emergency service vehicles throughout the Plan Area.

Policy M-3.4: Prioritize the movement of emergency service vehicles throughout downtown by 1) Allowing emergency service vehicles to use proposed dedicated transit lanes; and 2) Upgrading signal technology to provide emergency pre-emption throughout Downtown Oakland.

²² Federal Aviation Administration (FAA), 2019. Airport Data and Contact Information. Effective March 28, 2019. Database searched for both public-use and private-use facilities in Alameda County. Available at: http://www.faa.gov/airports/airport_safety/airportdata_5010/, accessed March 27, 2019.

The roadways in Downtown Oakland serve a variety of users such as motorists, bicyclists, pedestrians, and transit riders. Another important roadway user is emergency service vehicles such as police cars, fire apparatus, ambulances, and in some cases tow trucks and public utility trucks. Allowing these vehicles to reach their destinations quickly and safely is a critical element of a strong transportation system.

As previously discussed, several evacuation routes in the City of Oakland cross the Plan Area. Buildout under the Specific Plan would not result in the permanent movement or closure of these routes. The changes planned for existing roadways are intended to encourage connectivity for all modes of transportation and to prioritize the movement of emergency vehicles, and therefore would not interfere with emergency response or evacuation plans.

Adoption and development under the Specific Plan could require temporary lane and roadway closure during construction activities. This could impede the implementation of emergency response and evacuation plans. SCA-TRANS-2 Construction Activity in the Public Right-of-Way (#76) would require all projects with construction activities that would result in temporary road closures to obtain an obstruction permit and to develop and implement a traffic control plan. Compliance with this measure would reduce the potential to impair or physically interfere with an adopted emergency response or evacuation plan to a less-than-significant level.

The Plan Area is characterized by a traditional street grid, and consequently there are no streets more than 600 feet in length without a minimum of two emergency access routes. The Specific Plan does not propose the movement or closure existing roadways, or the addition of long stretches of new road. The Specific Plan indicates that in a few limited areas where the vehicular network is incomplete or disconnected, new street connections or segments would need to be opened. This would potentially create more emergency access routes. Buildout under the Specific Plan would not create a street exceeding 600 feet in length with fewer than two emergency access routes. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to insufficient emergency access along streets and interference with emergency response and evacuation plans.

(5) Wild Fires (Criterion 10)

The Plan Area is located within a highly urbanized area that is more than two miles from areas that have been identified as susceptible to wild fires in the City's Vegetation Management Plan.²³ Therefore, impacts associated with implementation of the Specific Plan and reasonably

²³ Oakland Fire Department, 2018. Draft Vegetation Management Plan, City of Oakland, California, May.

foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to wild fires.

c. Cumulative Hazards and Hazardous Materials Impacts

The cumulative geographic context for hazardous materials for the adoption and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years consists of the Plan Area and its vicinity, and roadways used to transport hazardous materials.

The intensification of land uses caused by future development in the Plan Area together with other development projects in Oakland could result in the increased use of hazardous household and commercial materials, and thereby create a cumulative increase in risk associated with accidental release of hazardous materials into the environment. These impacts could occur through transport of hazardous materials and waste, inadvertent release of hazardous materials during construction and operation of projects within the Plan Area and its vicinity, and potential accidents that require emergency response.

Because development projects in the vicinity of the Plan Area could involve the same roadways used by developments within the Plan Area, implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years could contribute to cumulative increases in the amount of hazardous material transported to and from the Plan Area. Cumulative increases in the transportation of hazardous materials and wastes would cause a less-than-significant impact because the probability of such accidents is relatively low due to the stringent policies regulating the transport of hazardous materials.

Federal, State, and City of Oakland regulations governing the use and disposal of hazardous materials, and the management of hazardous building materials and contaminated soil and groundwater, would apply to all new development, including implementation of the Specific Plan and its associated development, and to projects in the vicinity of the Plan Area. Additionally, all new development within the city of Oakland is required to comply with the hazardous materials management requirements in SCA-HAZ-1: Hazardous Materials Related to Construction (#43), SCA-HAZ-2: Hazardous Building Materials and Site Contamination (#44), SCA-HAZ-3: Hazardous Materials Business Plan (#45), SCA-HYD-3: State Construction General Permit (#50), and SCA-AIR-7: Asbestos in Structures (#27). Compliance with existing regulations and City of Oakland SCAs would prevent workers, the public, and the environment within the Plan Area and its vicinity from being exposed to hazardous materials, including hazardous buildings materials and contaminated soil and groundwater.

The Specific Plan would prioritize emergency vehicle access and would not alter roadways in a manner that would interfere with emergency response or evacuation plans. Projects within the Plan Area and its vicinity would be required to comply with SCA-TRANS-2: Construction Activity

in the Public Right-of-Way (#77), which would prevent a cumulative impact to emergency vehicle access from occurring due to temporary road closures associated with construction activities.

The Plan Area and surrounding cumulative projects are not located near an existing airport. Therefore, the proposed land uses are not subject to cumulative impacts from excessive airplane noise. Development under the Specific Plan and cumulative projects could construct structures more than 200 feet tall. Such projects would be subject to review by the Federal Aviation Administration to ensure that they would not pose a hazard to air navigation.

For these reasons, cumulative impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to hazards and hazardous materials.

J. HYDROLOGY AND WATER QUALITY

This section describes the hydrology and water quality conditions, including coastal hazards, associated with the Downtown Oakland Specific Plan Area and analyzes how implementation of the Downtown Oakland Specific Plan and its associated development may affect these conditions. Specific Plan, existing City policies, and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified.

1. Setting

This section provides a brief description of the existing hydrological setting, including climate, run-off and drainage, flooding, coastal hazards, and water quality at and near the Plan Area related to hydrology and water quality.

a. Climate

The climate of the Plan Area vicinity is characterized as Mediterranean, with cool wet winters and warm dry summers. The average annual high temperature between 1970 to 2012 was approximately 67 degrees Fahrenheit (° F), and the average annual low temperature was approximately 51.8° F.¹ The mean annual rainfall in the Plan Area vicinity for the period between 1970 and 2012 was approximately 23.27 inches, and primarily occurred from October through April.² During the period of record, annual rainfall has varied from approximately 9.99 inches (1976) to approximately 41.07 inches (1998), with a highest one-day precipitation total of approximately 4.47 inches on January 4, 1982.³

b. Runoff and Drainage

The Plan Area is located in a relatively flat and highly urbanized area. The existing ground surface elevation of the Plan Area generally ranges from 20 feet to 40 feet above the 1988 North American Vertical Datum (NAVD88), with some low-lying areas along Glen Echo Creek, Lake Merritt, Lake Merritt Channel, and the Estuary (Oakland Inner Harbor), which are less than 20 feet NAVD88.⁴

¹ Western Regional Climate Center, 2019a. General Climate Summary Tables-Temperature, Oakland Museum, California. Available at: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6336>, accessed March 7, 2019.

² Western Regional Climate Center, 2019b. General Climate Summary Tables-Precipitation, Oakland Museum, California. Available at: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6336>, accessed March 7, 2019.

³ Ibid.

⁴ United States Geological Survey (USGS), 2018. Oakland West Quadrangle, California, 7.5-Minute Series.

The major surface water bodies in the Plan Area are Glen Echo Creek at the northeastern corner, Lake Merritt along the northeastern border, and the Estuary along the southern border. Glen Echo Creek flows into Lake Merritt under Grand Avenue. Lake Merritt connects to the Oakland Estuary through the Lake Merritt Channel and eventually flows into San Francisco Bay. The Plan Area is mostly developed with impervious surfaces. Stormwater is generally captured by City of Oakland drainage systems and conveyed to receiving waters in an underground pipe network. The City's drainage system drains into Lake Merritt to the east of the Plan Area and drains into the Oakland Estuary to the south of the Plan Area.⁵

c. Flooding

As shown in Figure V.J-1, a relatively small area in the eastern portion of the Plan Area along Lake Merritt and the southern portion of the Plan Area along the Estuary are located within a Federal Emergency Management Agency (FEMA)-designated one percent annual chance (100-year) Flood Hazard Zone. Portions of the Plan Area adjacent to these 100-year Flood Hazard Zone are located within 0.2 percent (500-year) Flood Hazard Zone. Most of the Plan Area is designated as "Area of Minimal Flood Hazard" Zone X on Flood Insurance Rate Maps (FIRMs) published by FEMA.⁶ The "Area of Minimal Flood Hazard" Zone X designation indicates that most of the Plan Area is outside the 100-year and 500-year floodplains.

As shown in Figure V.J-2, the northeastern corner of the Plan Area is designated as being within a dam failure inundation area of the Upper Edwards, Lower Edwards, and Piedmont reservoirs as indicated on Figure 6.1 of the Safety Element in City of Oakland's General Plan.⁷ The rest of the Plan Area is located outside of any dam failure inundation area.

The intensity and frequency of precipitation events is expected to increase due to climate change. The combination of higher tides due to sea level rise and larger storms with Oakland's aging stormwater drainage systems may lead to significant increases in both coastal and urban flooding and flood damage.⁸ The City of Oakland will develop an updated 2006 Storm Drainage Master Plan that will include a comprehensive asset management system and state-of-the art modeling that evaluates how the system performs under different storm scenarios and incorporates

⁵ Sowers, Janet M. et al., 1993. Creek & Watershed Map of Oakland & Berkeley. Revised 1995 & 2000.

⁶ Federal Emergency Management Agency (FEMA), 2018. Flood Insurance Rate Map (FIRM), Alameda County, California and Incorporated Areas, Map Number 06001C0067H. Revised December 21.

⁷ City of Oakland, 2004. Protect Oakland: City of Oakland General Plan, Safety Element — Flooding Hazards, November. Amended 2012.

⁸ City of Oakland, 2016. Resilient Oakland. Available at: https://www.100resilientcities.org/wp-content/uploads/2017/07/Resilient-Oakland_11-22_web.pdf, accessed March 15, 2019.

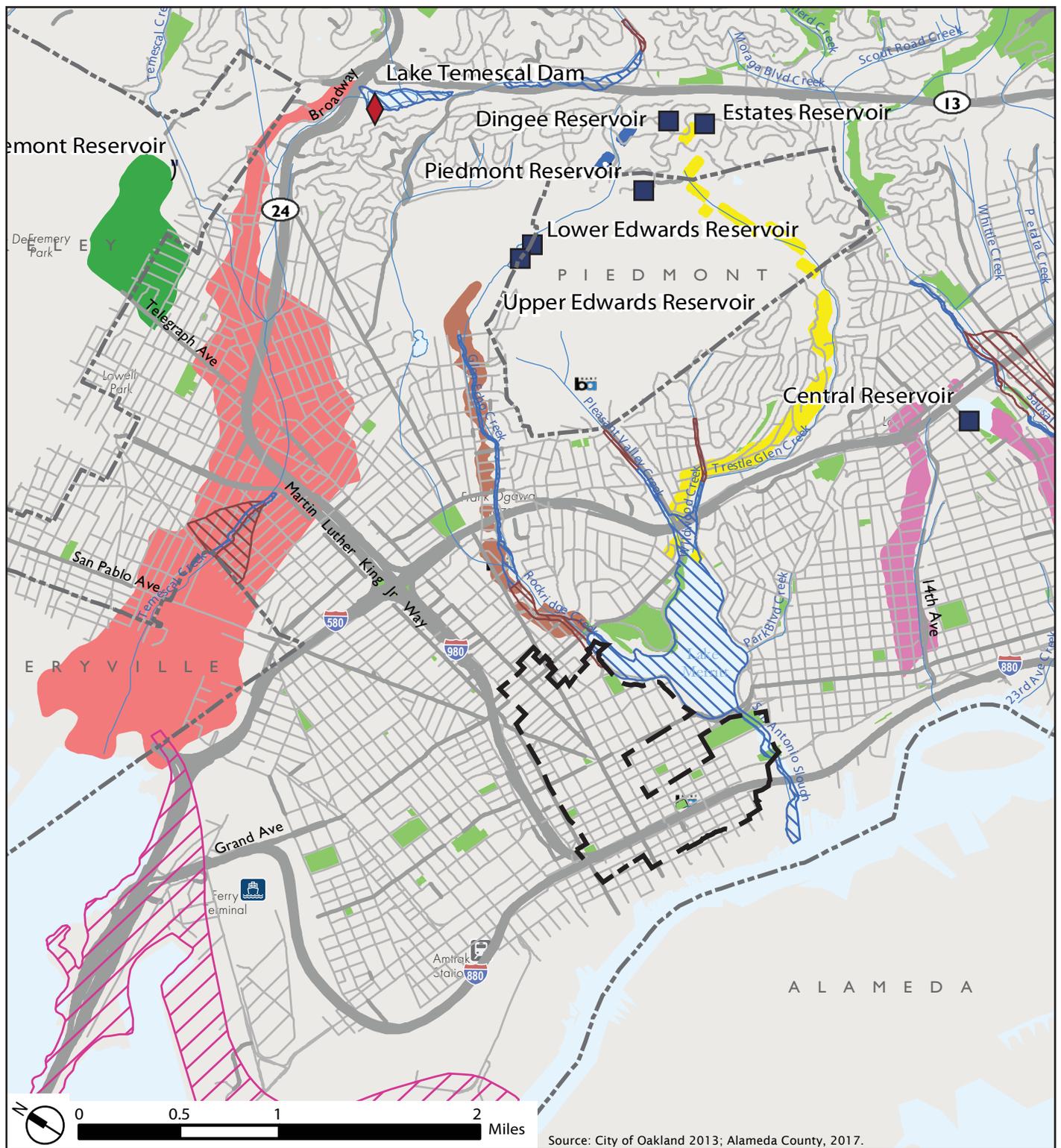


Legend

- Downtown Plan Boundary
- Parks
- ba BART Station
- 1% Annual Chance Flood Hazard
- 0.2% Annual Chance Flood Hazard
- BART Line
- Railroad

Downtown Oakland Specific Plan EIR

**Figure V.J-1
Flood Hazard Zones**



Legend

- Downtown Plan Boundary
- Oakland City Limit
- Dam
- Reservoir
- Stream
- Tsunami run-up zone
- 100-year floodplain
- 500-year floodplain

Dam failure inundation sites

- Central
- Temescal
- Claremont
- Dingee
- Estates
- Upper/Lower Edwards/Piedmont

Downtown Oakland Specific Plan EIR

Figure V.J-2
Dam Failure Inundation Areas

precipitation changes and sea level rise due to climate change. As described in *Section V.N, Utilities*, the City's existing 2006 Storm Drainage Master Plan has fallen out of date and the storm drainage system is in need of maintenance, repairs and upgrades. The Storm Drainage Master Plan will be used to identify critical maintenance and improvement projects that will reduce potentially costly flooding. The updated Storm Drainage Master Plan will be continuously updated as a tool for guiding investment in the City's storm drainage system.⁹

d. Coastal Hazards

Coastal hazards, including sea level rise, seiche, tsunami, and extreme high tides relevant to the Plan Area and its vicinity are described below.

(1) Sea Level Rise

According to the San Francisco Bay Conservation and Development Commission (BCDC), sea level (including in the San Francisco Bay) is rising and is expected to continue to rise even with existing efforts to mitigate global warming through reduction of greenhouse gas emissions.¹⁰

Rates of sea level rise may vary at specific locations as local subsidence or uplift affects the relative change in sea level between land masses and the ocean. In the San Francisco Bay area, the background rate of sea level rise has been estimated to be approximately 0.076 inches per year from 1900 to 2008.¹¹ According to the City and County of San Francisco, likely sea level rise in the San Francisco area is projected to be 6 ± 2 inches between 2000 and 2030, with an unlikely but possible sea level rise of up to 12 inches during this period; likely sea level rise is projected to be 11 ± 4 inches between 2000 and 2050, with an unlikely but possible sea level rise of up to 24 inches during this period; and sea level rise is projected to be 36 ± 10 inches between 2000 and 2100, with an unlikely but possible sea level rise of up to 66 inches during this period.¹² Low-lying coastal residential areas of Oakland, the Port of Oakland, the former Oakland Army Base, and a variety of low-lying areas near the Coliseum, Oakland International Airport, and Interstate 880 are most at risk. According to the Bay Conservation and Development Commission, Oakland is

⁹ City of Oakland, 2016. Resilient Oakland. Available at: https://www.100resilientcities.org/wp-content/uploads/2017/07/Resilient-Oakland_11-22_web.pdf, accessed March 15, 2019.

¹⁰ San Francisco Bay Conservation and Development Commission (BCDC), 2011. Living with a Rising Bay: Vulnerability and Adaptation in San Francisco Bay and on its Shoreline. Approved October 6.

¹¹ National Research Council of the National Academies, 2012. Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future, Chapter 4.

¹² City and County of San Francisco, Sea Level Rise Committee, 2014. Guidance for Incorporating Sea Level Rise into Capital Planning in San Francisco: Assessing Vulnerability and Risk to Support Adaptation, September 22.

expected to experience 12 to 24 inches of sea level rise by 2050 and 36 to 66 inches of sea level rise by 2010.¹³

Figure V.J-3 shows the predicted extent of inundation associated with projected 48-inch and a 72-inch sea level rise (water levels are measured above mean higher high water for Oakland). The figure shows that portions of the Plan Area along the Estuary would be permanently inundated under both the 48-inch and 72-inch sea level rise scenarios. Sea level rise will not impact all Oakland residents in the same way, as some are more vulnerable than others. Some communities lack access to preparedness information, transportation options, healthcare, and insurance, which increases their vulnerability to the adverse impacts of a flood event.¹⁴

The City has been working on developing a strategy to address sea level rise. The Preliminary Sea Level Rise Road Map (Road Map)¹⁵ document was developed as part of Resilient Oakland, a coordinated effort to align resources, plans, and actions in support of a thriving and resilient community. The process that led to the development of the Road Map included collaboration of a working group that met in June and August 2016. The working group was made up of City and Port of Oakland staff, county and regional agencies and districts, educational organizations, and community stakeholders, such as the San Francisco Estuary Institute, and the Pacific Institute.

The Sea Level Rise Roadmap document summarizes existing impacts and future impacts of Sea Level Rise (SLR); relevant policies and regulations; and vulnerability and risk assessments conducted to date, including mapping critical assets and identifying vulnerable communities to bring an equity lens and voice to the people who are most impacted. It also identifies priority actions.

The Road Map includes the following priority action that is directly relevant to the Plan Area:¹⁶

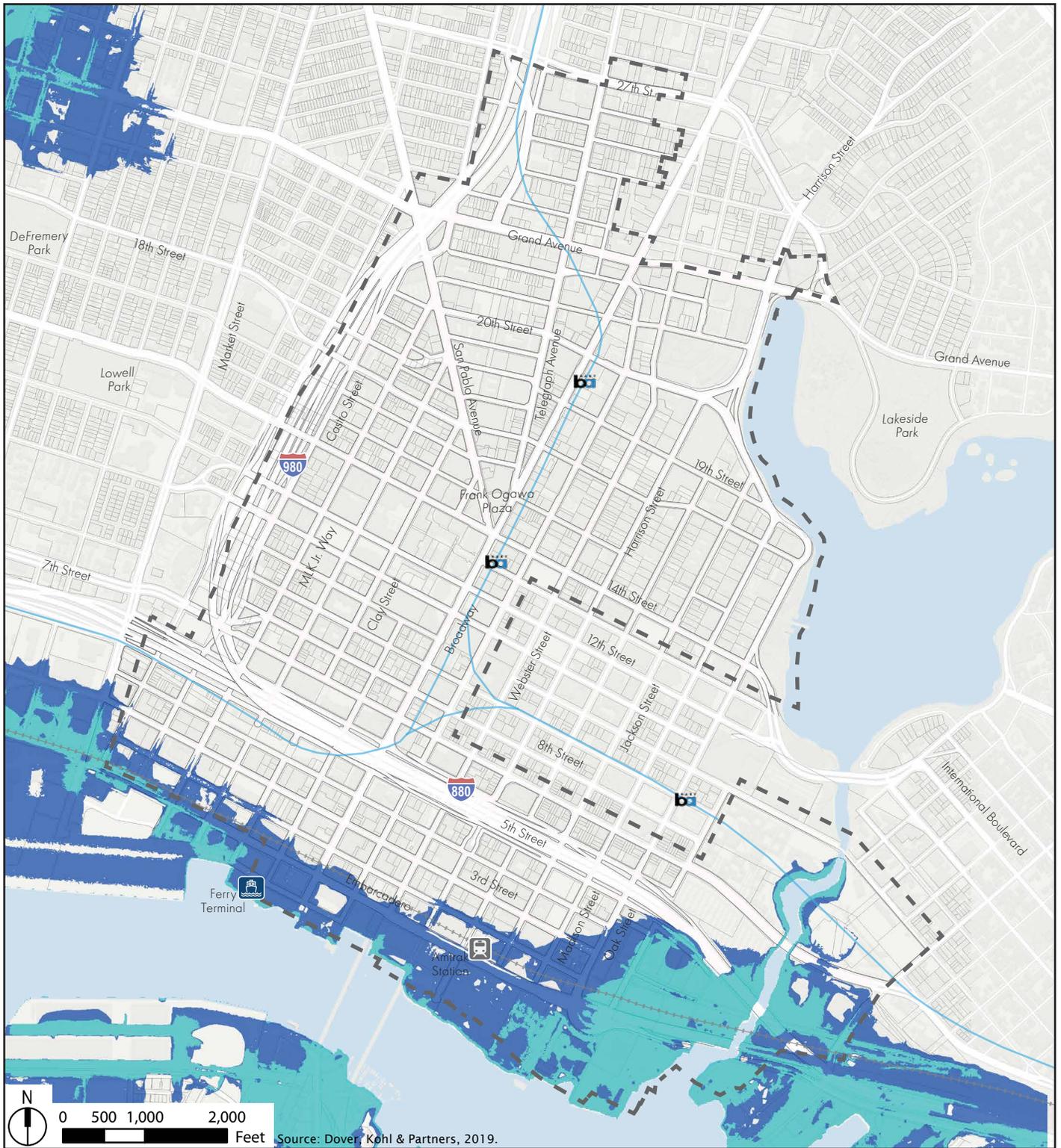
Enable climate smart development. Incorporate SLR Considerations in Plan Downtown Oakland

¹³ Bay Conservation Development Commission (BCDC), 2015. "Alameda County Subregional Pilot Program." Adapting to Rising Tides Program.

¹⁴ City of Oakland, 2016. Resilient Oakland. Available at: https://www.100resilientcities.org/wp-content/uploads/2017/07/Resilient-Oakland_11-22_web.pdf, accessed March 15, 2019.

¹⁵ City of Oakland, 2017. Oakland Preliminary Sea Level Rise Road Map, Fall.

¹⁶ Ibid.



Legend

- Downtown Plan Boundary
- 48 Inches of Sea Level Rise
- 72 Inches of Sea Level Rise
- ba BART Station
- BART Line
- Railroad

Downtown Oakland Specific Plan EIR

Figure V.J-3
Sea Level Rise Overlay

(1) Seiche

A seiche is standing wave caused by a temporary disturbance or oscillation of the water level in a body of water. Seiches occur most frequently in enclosed or semi-enclosed basins such as lakes, bays, or harbors. They can be triggered in an otherwise still body of water by strong winds, changes in atmospheric pressure, earthquakes, tsunamis, or tides. Triggering forces that set off a seiche are most effective if they operate at specific frequencies relative to the size of an enclosed basin. Coastal measurements of sea level often show seiches with amplitudes of a few centimeters and periods of a few minutes due to oscillations of the local harbor, estuary, or bay, superimposed on the normal tidal changes. Seiches are not considered a hazard in the San Francisco Bay (Bay) based on the natural oscillations of the Bay.¹⁷ Although no documented case has ever occurred, it is possible that a seiche in an upland reservoir could cause downstream flooding that would be caused by water overtopping a dam or reservoir.¹⁸

(2) Tsunami

Tsunamis are long-period water waves caused by underwater seismic events, volcanic eruptions, or undersea landslides. Tsunamis affecting the San Francisco Bay region would originate west of the Bay in the Pacific Ocean. Areas that are highly susceptible to tsunami inundation tend to be low-lying coastal areas such as tidal flats, marshlands, and former bay margins that have been artificially filled. Inundation or damage caused by a tsunami may disrupt highway traffic in those low-lying areas. Tsunamis entering San Francisco Bay through the relatively narrow Golden Gate would tend to dissipate as the energy of the wave spreads out as the Bay becomes wider and shallower.¹⁹

The California Emergency Management Agency, California Geological Survey, and the Tsunami Research Center at the University of Southern California have produced tsunami hazard inundation maps for areas along the state's coastline, including Oakland. Portions of the Plan Area along the Estuary and Lake Merritt Channel are located within the mapped Tsunami Inundation Area.²⁰

¹⁷ Borrero, J., Dengler, L., Uslu, B., Synolakis, C., 2006. Numerical Modeling of Tsunami Effects at Marine Oil Terminals in San Francisco Bay, June 8. Report prepared for: Marine Facilities Division of the California State Lands Commission.

¹⁸ City of Oakland, 2004. Protect Oakland: City of Oakland General Plan, Safety Element – Flooding Hazards, November. Amended 2012.

¹⁹ Ibid.

²⁰ California Emergency Management Agency (CEMA), 2009. Tsunami Inundation Map for Emergency Planning, Oakland West Quadrangle, July 31.

(3) Extreme High Tides

Extreme high tides in San Francisco Bay result from the combined effects of astronomical high tides (related to the lunar cycle) and other factors, including winds, barometric pressure, ocean temperatures, and stormwater runoff. In California, the highest astronomical tides occur in the summer and winter, and therefore extreme high tides are most likely to occur during these times. Based on the 129-year record of daily high tides, the US Army Corps of Engineers (Corps) has developed an estimated 100-year high tide elevation for various locations in the Bay (an extreme high tide with a probability of occurrence every 100 years). The elevation of the estimated 100-year tide at Oakland is approximately 9.41 above the NAVD88. A more recent study, the FEMA regional hydrodynamic model, which evaluated a period from 1973 to 2003, estimates the 100-year tide at Oakland to be approximate 9.82 feet NAVD88.²¹

e. Surface Water and Groundwater Quality

The quality of surface water and groundwater in the vicinity of the Plan Area is affected by past and current land uses within the Plan Area and the watershed and the composition of geologic materials in the vicinity. The State Water Resources Control Board (State Water Board) and nine regional water quality control boards (regional water boards) regulate the quality of surface water and groundwater bodies throughout California. In the Bay Area, including the Plan Area vicinity, the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) is responsible for implementing the Water Quality Control Plan (Basin Plan).²² 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.

Glen Echo Creek is listed in the Basin Plan as providing the beneficial uses of warm freshwater habitat, wildlife habitat, water contact recreation, and noncontact water recreation. Lake Merritt is listed as providing the beneficial uses of commercial and sport fishing, shellfish harvesting, estuarine habitat, fish spawning, warm freshwater habitat, wildlife habitat, water contact recreation, and noncontact water recreation. The Estuary is listed as providing the beneficial uses of estuarine habitat, wildlife habitat, water contact recreation, noncontact water recreation, and navigation. The Central San Francisco Bay is listed as providing the beneficial uses of industrial service supply, industrial process supply, commercial and sport fishing, shellfish harvesting,

²¹ Architecture, Engineering, Consulting, Operations, and Maintenance (AECOM), 2016. San Francisco Bay Tidal Datums and Extreme Tides Study, February.

²² San Francisco Bay Regional Water Quality Control Board, 2017. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). Incorporating all amendments as of May 4.

estuarine habitat, fish migration, preservation of rare and endangered species, fish spawning, wildlife habitat, water contact and noncontact recreation, and navigation.²³

Under Section 303 (d) of the Clean Water Act (CWA) (described in the Regulatory Setting), states must present the U.S. Environmental Protection Agency (EPA) with a list of “impaired water bodies,” defined as those water bodies that do not meet water quality standards, which in some cases results in the development of a total maximum daily load (TMDL). On a broad level, the TMDL process leads to a “pollution budget” designed to restore the health of a polluted body of water. The TMDL process provides a quantitative assessment of the sources of pollution contributing to a violation of the water quality standards and identifies the pollutant load reductions or control actions needed to restore and protect the beneficial uses of the impaired waterbody.

The State Water Board has listed Lake Merritt as an impaired water body due to impacts from organic enrichment/low dissolved oxygen and trash. The Oakland Estuary has been listed as an impaired water body due to impacts from indicator bacteria, chlordane, copper, dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxin compounds, furan compounds, invasive species, lead, mercury, polychlorinated biphenyls (PCBs), selenium, toxicity, and zinc. The Central San Francisco Bay has been listed as an impaired water body due to impacts from chlordane, DDT, dieldrin, dioxin compounds, furan compounds, invasive species, mercury, PCBs, dioxin-like PCBs, selenium, and trash. Glen Echo Creek is not listed as an impaired water body. TMDLs have been established for mercury and PCBs in the Oakland Estuary and TMDLs have been established for mercury, PCBs, and selenium in Central San Francisco Bay.²⁴

The Plan Area is located in the Santa Clara Valley Groundwater Basin and East Bay Plain Subbasin. The East Bay Plain Subbasin is listed in the Basin Plan as providing the beneficial uses of municipal and domestic water supply, industrial process water supply, industrial service water supply, and agricultural water supply.²⁵

In the upper 200 feet of the subsurface, the groundwater is characterized as calcium bicarbonate with total dissolved solids (TDS) ranging from 360 to 1010 mg/L, while groundwater is

²³ Ibid.

²⁴ State Water Resources Control Board, 2017. Final 2014 and 2016 California Integrated Report (Clean Water Act Section 303(d) List/305(b) Report), Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml, accessed July 10, 2019.

²⁵ San Francisco Bay Regional Water Quality Control Board, 2017. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan). Incorporating all amendments as of May 4.

characterized as sodium bicarbonate from 200 to 1000 feet below ground surface with TDS ranging from 310 to 1420 mg/L.²⁶

2. Regulatory Setting

This section provides a brief description of the regulations affecting water resources at the federal, State, and local level; and local policies and programs related to hydrology and water quality.

a. Federal

(1) Federal Clean Water Act of 1972

The Federal CWA of 1972 is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. It is administered by the EPA. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless specifically authorized by a permit. The EPA has delegated its authority to implement and enforce most of the applicable water quality provisions of this law to the individual states. In California, the provisions are enforced by nine regional water boards under the auspices of the State Water Board.

National Pollutant Discharge Elimination System (NPDES) Permit Program.

Under Section 402 of the CWA, the discharge of pollutants through a point source into waters of the United States is prohibited unless the discharge is in compliance with an NPDES permit. The NPDES program regulates the discharge of pollutants from municipal and industrial wastewater treatment plants and sewer collection systems, as well as stormwater discharges from industrial facilities, municipalities, and construction sites. In California, implementation and enforcement of the NPDES program is conducted through the State Water Board and the nine regional water boards. The regional water boards set standard conditions for each permittee in their region, which includes effluent limitations and monitoring programs.

(2) Federal Flood Insurance Program

In 1968, Congress created the National Flood Insurance Program in response to the rising cost of taxpayer funded disaster relief for flood victims and the increasing amount of damage caused by floods. The National Flood Insurance Program makes federally-backed flood insurance available

²⁶ California Department of Water Resources (CDWR), 2004. California's Groundwater: Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin, Bulletin 118, February 27.

for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage. FEMA manages the National Flood Insurance Program and creates FIRMs that designate 100-year flood hazard zones and delineate other flood hazard areas. A 100-year flood hazard zone is the area that has a 1-in-100 (1 percent) chance of being flooded in any given year based on historical data and hydraulic modeling.

b. State

(1) Porter-Cologne Act and State Implementation of Clean Water Act Requirements

The Porter-Cologne Water Quality Control Act (California Water Code, Division 7, Water Quality) was promulgated in 1969. It established the State Water Board and divided the State into nine hydrologic regions, each overseen by a regional water board. The Plan Area is located within the San Francisco Bay district. The State Water Board is the primary State agency responsible for protecting the quality of the State's surface and groundwater supplies, but much of its daily implementation authority is delegated to the nine regional water boards. The Porter-Cologne Act also provides for the development and tri-annual review of Water Quality Control Plans that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters.

(2) 2014 Sustainable Groundwater Management Act Requirements

The 2014 Sustainable Groundwater Management Act (SGMA) requires local public agencies and Groundwater Sustainability Agencies in medium- and high-priority basins to develop and implement Groundwater Sustainability Plans (GSPs) or Alternatives to GSPs.²⁷ GSPs are detailed road maps for how groundwater basins will reach long-term sustainability. Existing Groundwater Management Plans (GWMPs) will be in effect until GSPs are adopted in medium- and high-priority basins. The project is located in the Santa Clara Valley – East Bay Plain Groundwater Basin, which is designated as a medium-priority basin and is subject to SGMA.²⁸ A GSP or GWMP has not yet been developed for the portion of the Santa Clara Valley – East Bay Plain Groundwater Basin where the Plan Area is located.²⁹

²⁷ California Department of Water Resources, 2019a. Groundwater Sustainability Plans. Available at: <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management/Groundwater-Sustainability-Plans>, accessed June 28, 2019.

²⁸ California Department of Water Resources, 2019b. 2018 SGMA Basin Prioritization Dashboard. Available at: <https://gis.water.ca.gov/app/bp2018-dashboard/p1/#>, accessed June 28, 2019.

²⁹ California Department of Water Resources, 2019c. Groundwater Information Center Interactive Map Application. Available at: <https://gis.water.ca.gov/app/gicima/>, accessed June 28, 2019.

(3) NPDES Construction General Permit

Construction projects that disturb more than 1 acre of land during construction are required to comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002 (Construction General Permit).³⁰

To obtain coverage under the Construction General Permit, the project applicant must provide via electronic submittal a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other documents required by Attachment B of the Construction General Permit. Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation. The permit also covers linear underground and overhead projects such as pipeline installations. Construction General Permit activities are regulated at a local level by the Regional Water Board.

The Construction General Permit uses a risk-based permitting approach and mandates certain requirements based on the project risk level (i.e., Level 1, Level 2, or Level 3). The project risk level is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on the project location and timing (i.e., wet season versus dry season activities). The receiving water risk depends on whether the project would discharge to a sediment-sensitive receiving water. The determination of the project risk level would be made by the project applicant when the Notice of Intent is filed (and more details of the timing of the construction activity are known).

The performance standard in the Construction General Permit is that dischargers shall minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through the use of controls, structures, and best management practices (BMPs) that achieve Best Available Technology for treatment of toxic and non-conventional pollutants and Best Conventional Technology for treatment of conventional pollutants. A SWPPP must be prepared by a Qualified SWPPP Developer that meets the certification requirements in the Construction General Permit. The purpose of the SWPPP is (1) to identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges; and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Operation of BMPs must be overseen by a Qualified SWPPP Practitioner that meets the requirements outlined in the permit.

³⁰ State Water Resources Control Board (SWRCB) Division of Water Quality, 2009. Construction General Permit Fact Sheet. 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ.

The SWPPP must also include a construction site monitoring program. Depending on the project risk level, the monitoring program may include visual observations of site discharges, water quality monitoring of site discharges (pH, turbidity, and non-visible pollutants, if applicable), and receiving water monitoring (pH, turbidity, suspended sediment concentration, and bioassessment).

(4) NPDES Municipal Regional Permit

Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in the City of Oakland are regulated under the California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. CAS612008, adopted October 14, 2009 (MRP). The MRP is overseen by the Regional Water Board.³¹ The City participates in the Alameda Countywide Clean Water Program, which provides guidance and assistance to municipalities in Alameda County to help them comply with requirements of the MRP.

MRP Provision C.3 addresses post-construction stormwater management requirements for regulated projects, such as new development and redevelopment projects that create or replace 10,000 square feet or more of impervious surface, and special land use categories³² that create or replace 5,000 square feet or more of impervious surface. Provision C.3 requires regulated projects to implement Low Impact Development (LID) source control, site design, and stormwater treatment. LID employs principles such as preserving and recreating natural landscape features and minimizing impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource, rather than a waste product. Practices used to adhere to these LID principles include measures such as rain barrels and cisterns, green roofs, permeable pavement, preserving undeveloped open space, and biotreatment through rain gardens, bioretention units, bioswales, and planter/tree boxes.

To address trash impairment, the City of Oakland prepared a Long-Term Trash Load Reduction Plan and Assessment Strategy (Long-Term Plan)³³ and submitted it to the Regional Water Board in compliance with Provision C.10.c of the MRP. The Long-Term Plan is consistent with the Long-Term Trash Load Reduction Framework developed in collaboration with Water Board staff. The Long-Term Plan includes specific provisions to address trash problems in the Downtown Oakland

³¹ San Francisco Bay Regional Water Quality Control Board, 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. CAS612008, November 19.

³² Special land use categories include auto service facilities, retail gasoline outlets, restaurants, or stand-alone uncovered parking lots.

³³ City of Oakland, 2014. Long-Term Trash Reduction Plan and Progress Assessment Strategy, February 1.

area where the combination of transit hubs, high pedestrian traffic, and high-density land uses results in an elevated trash problem. Specifically, the Long-Term Plan calls for evaluation of pilot activities including trash containment, cigarette butt receptacles, installation of automatic retractable screens, and full-capture installation. Much of the downtown area, including the Plan Area, is swept three times per week. Based on the street sweeping evaluation and recommendations, the Plan Area may be recommended for operation modifications that provide increased efficiency and/or possible installation of automatic screens in key locations. MRP Provision C.3.g pertains to hydromodification³⁴ management. Regulated projects that create and/or replace 1 acre or more of impervious surface are Hydromodification Management projects, except where one of the following applies:

1. The post-project impervious surface area is less than, or the same as, the pre-project impervious surface area.
2. The project is located in a catchment that drains to a hardened (e.g., continuously lined with concrete) engineered channel or channels or enclosed pipes that extend continuously to the Bay, Delta, or flow-controlled reservoir, or drains to channels that are tidally influenced.
3. The project is located in a catchment or sub-watershed that is highly developed (i.e., that is 70 percent or more impervious).

Hydromodification standards require that stormwater discharges associated with Hydromodification Management projects do not cause an increase in the erosion potential of the receiving stream over the existing condition. Increases in runoff rate and volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force. According to the Hydromodification Applicability Map of the MRP (as shown in Figure V.J-4), the southern portion of the Plan Area along the estuary is exempt from hydromodification because it is in a tidally-influenced or depositional area. However, the middle and northern portions of the Plan Area would be potentially susceptible to hydromodification.³⁵

³⁴ Hydromodification is defined as the modification of a stream's hydrograph, caused in general by increases in runoff flow rate and duration that result when land is developed (e.g., made more impervious). The effects of hydromodification include, but are not limited to, increased bed and bank erosion, loss of habitat, increased sediment transport and deposition, and increased flooding.

³⁵ San Francisco Bay Regional Water Quality Control Board, 2015. San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, Order No. R2-2015-0049, NPDES Permit No. CAS612008, November 19.



Legend

- Downtown Plan Boundary
- Tidally Influenced/Depositional - Exempt
- BART Station
- Enclosed Pipe or Culvert
- BART Line
- Natural Creek
- Railroad
- Earthen Channel

Downtown Oakland Specific Plan EIR

Figure V.J-4
Hydromodification Applicability Map

c. Local**(1) City of Oakland General Plan**

The following objective and policy from the City of Oakland's General Plan Open Space, Conservation, and Recreation Element (OSCAR) would be applicable implementation of the Specific Plan and its associated development:

Objective CO-5: Water Quality: To minimize the adverse effects of urbanization on Oakland's groundwater, creeks, lakes, and nearshore waters.

Policy CO 5.3: Control of Urban Runoff. Employ a broad range of strategies, compatible with the 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 function.

The following policies and actions from the City of Oakland's General Plan Safety Element (Chapter 6, Geologic Hazards) are applicable to would be applicable implementation of the Specific Plan and its associated development:

Policy GE-2: Continue to enforce ordinances and implement programs that seek specifically to reduce the landslide and erosion hazards

- Action GE-2.2: Continue to enforce the grading, erosion and sedimentation ordinance by requiring, under certain conditions, grading permits and plans to control erosion and sedimentation.
- Action GE-2.3: Continue to enforce provisions under the creek protection, stormwater management and discharge control ordinance designed to control erosion and sedimentation.
- Action GE-2.5: Enact regulations requiring new development projects to employ site-design and source-control techniques to manage peak stormwater runoff flows and impacts from increased runoff volumes.

Policy FL-1: Enforce and update local ordinance, and comply with regional orders that would reduce the risk of storm-induced flooding.

- Action FL-1.1: Amend, as necessary, the city's regulations concerning new construction and major improvements to existing structures within flood zones in order to maintain compliance with federal requirements and, thus, remain a participant in the National Federal Insurance Program.
- Action FL-1.3: Comply with all applicable performance standards pursuant to the 2003 Alameda countywide National Pollutant Discharge Elimination System municipal stormwater permit that seek to manage increases in stormwater runoff flows from new-development and redevelopment construction projects.

- Action FL-1.4: Continue to enforce the grading, erosion, and sedimentation ordinance by prohibiting the discharge of concentrated stormwater flows by other than approved methods.

Policy FL-2: Continue or strengthen city programs that seek to minimize the storm-induced flooding hazard.

- Action FL-2.1: Continue to repair and make structural improvements to storm drains to enable them to perform to their design capacity in handling water flows.
- Policy FL-4: Minimize further the relatively low risks from non-storm-related forms of flooding.
- Action FL-4.1: Request from the state Division of Safety of Dams a timeline for the maintenance inspection of all operating dams in the city.
- Action FL-4.2: Review for adequacy, and update if necessary, procedures adopted by the city pursuant to the Dam Safety Act for the emergency evacuation of areas located below major water-storage facilities.
- Action FL-4.3: Inform shoreline-property owners of the possible long-term economic threat posed by rising sea levels.
- Action FL-4.4: Stay informed of emerging scientific information on the subject of rising sea levels, especially on actions that local jurisdictions can take to prevent or mitigate this hazard.

(2) City of Oakland Municipal Code

The City of Oakland implements the following regulations to protect water quality and water resources:

Creek Protection, Stormwater Management, and Discharge Control Ordinance (Chapter 13.16 of the Oakland Municipal Code). This ordinance 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.³⁶ The ordinance establishes comprehensive guidelines for the regulation of discharges to the city's storm drain system and the protection of surface water quality. The ordinance identifies BMPs and other protective measures for development projects. 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. In 1997, the ordinance was amended to include the requirement for a creek protection permit for any construction or related activity on Creekside property. The ordinance includes enforcement

³⁶ Creekside property means those properties located in Oakland, as identified by the Environmental Services Manager, as having a creek or riparian corridor crossing the property and/or are contiguous to a creek or riparian corridor.

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. The provisions also list clear guidelines for creekside residents to protect the creek and habitat.

Grading Ordinance (Chapter 15.04.660). The Grading Ordinance requires a permit for grading activities on private or public property for projects that exceed certain criteria, including: 1) if the volume of the excavated fill material could exceed 50 cubic yards; 2) excavation could result in a 20 percent slope on-site; or 3) the depth of excavation could exceed five feet at any location. In these cases, the project sponsor would be required to apply for the grading permit and prepare a grading plan, erosion and sedimentation control plan, and drainage plan.

(3) Standard Conditions of Approval

The City's SCAs that are relevant to hydrology and water quality are listed below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-HYD-1: Erosion and Sedimentation Control Measures for Construction (#48)

Applicable To: All projects involving construction activities, except projects: a) requiring a grading permit; b) located on a hillside property (20% or greater slope); or c) requiring a category III or IV creek protection permit (see other conditions applicable to these other projects).

Requirement: The project applicant shall implement Best Management Practices (BMPs) to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable. At a minimum, the project applicant shall provide filter materials deemed acceptable to the City at nearby catch basins to prevent any debris and dirt from flowing into the City's storm drain system and creeks.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-HYD-2: Erosion and Sedimentation Control Plan for Construction (#49)

Applicable To: All projects involving construction activities that require a grading permit per OMC sec. 15.04.660 or are located on a hillside property (20% or greater slope), except projects requiring a category III or IV creek protection permit (see other conditions for creek protection permits).

a. Erosion and Sedimentation Control Plan Required

Requirement: The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. The Erosion and Sedimentation Control Plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading and/or construction Effective May 1, 2018 Page 42 operations. The Plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur.

Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the City. The Plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

b. Erosion and Sedimentation Control During Construction

Requirement: The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-HYD-3: State Construction General Permit (#50)

Applicable To: All projects that disturb one acre or more of surface area

Requirement: The project applicant shall comply with the requirements of the Construction General Permit issued by the State Water Resources Control Board (State Water Board). The project applicant shall submit a Notice of Intent, Stormwater Pollution Prevention Plan (SWPPP), and other required Permit Registration Documents to State Water Board. The project applicant shall submit evidence of compliance with Permit requirements to the City.

When Required: Prior to approval of construction-related permit

Initial Approval: State Water Resources Control Board; evidence of compliance submitted to Bureau of Building

Monitoring/Inspection: State Water Resources Control Board

SCA-HYD-4: Site Design Measures to Reduce Stormwater Runoff (#52)

Applicable To: All projects that create or replace (any amount) of impervious surface, except projects considered Regulated Projects under the NPDES C.3 requirements (see other condition for NPDES C.3 Regulated Projects).

Requirement: Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate site design measures into the project to reduce the amount of stormwater runoff. These measures may include, but are not limited to, the following:

- a. Minimize impervious surfaces, especially directly connected impervious surfaces and surface parking areas;
- b. Utilize permeable paving in place of impervious paving where appropriate;
- c. Cluster structures;
- d. Direct roof runoff to vegetated areas;
- e. Preserve quality open space; and
- f. Establish vegetated buffer areas.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A

SCA-HYD-5: Source Control Measures to Limit Stormwater Pollution (#53)

Applicable To: All projects, except projects considered Regulated Projects under the NPDES C.3 requirements (see other condition for NPDES C.3 Regulated Projects).

Requirement: Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate source control measures to limit pollution in stormwater runoff. These measures may include, but are not limited to, the following:

- a. Stencil storm drain inlets "No Dumping – Drains to Bay;"
- b. Minimize the use of pesticides and fertilizers;
- c. Cover outdoor material storage areas, loading docks, repair/maintenance bays and fueling areas;
- d. Cover trash, food waste, and compactor enclosures; and
- e. Plumb the following discharges to the sanitary sewer system, subject to City approval:
- f. Discharges from indoor floor mats, equipment, hood filter, wash racks, and, covered outdoor wash racks for restaurants;
- g. Dumpster drips from covered trash, food waste, and compactor enclosures;
- h. Discharges from outdoor covered wash areas for vehicles, equipment, and accessories;
- i. Swimming pool water, if discharge to on-site vegetated areas is not feasible; and
- j. Fire sprinkler test water, if discharge to on-site vegetated areas is not feasible.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A

SCA-HYD-6: NPDES C.3 Stormwater Requirements for Regulated Projects (#54)

Applicable To: all projects considered Regulated Projects under the NPDES C.3 requirements. Regulated Projects are:

- a. Projects that create or replace 10,000 square feet or more of new or existing impervious surface area; and
- b. The following projects that create or replace 5,000 square feet or more of new or impervious surface area:
 - i. Auto servicing, auto repair, and gas stations;
 - ii. Restaurants (full service, limited service, and fast-food); and
 - iii. Uncovered surface parking lots (including stand-alone parking lots, parking lots serving an activity, and the uncovered portion of parking structures unless drainage from the uncovered portion of the parking structure is connected to the sanitary sewer system).

Regulated Projects do not include individual single-family dwellings (that are not part of a larger multi-unit development) or routine maintenance activities.

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning; Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to building permit final

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-HYD-7: NPDES C.3 Stormwater Requirements for Small Projects (#55)

Applicable To: all projects involving either of the following:

- a. Projects that create or replace at least 2,500 square feet, but less than 10,000 square feet, of new or existing impervious, except projects considered Regulated Projects under the NPDES C.3 requirements (see other condition for NPDES C.3 Regulated Projects); or
- b. Individual single-family home projects that create or replace at least 2,500 square feet of new or existing impervious.

Requirement: Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant shall incorporate one or more of the following site design measures into the project:

- a. Direct roof runoff into cisterns or rain barrels for reuse;
- b. Direct roof runoff onto vegetated areas;
- c. Direct runoff from sidewalks, walkways, and/or patios onto vegetated areas;

- d. Direct runoff from driveways and/or uncovered parking lots onto vegetated areas;
- e. Construct sidewalks, walkways, and/or patios with permeable surfaces; or
- f. Construct bike lanes, driveways, and/or uncovered parking lots with permeable surfaces.

The project drawings submitted for construction-related permits shall include the proposed site design measure(s) and the approved measure(s) shall be installed during construction. The design and installation of the measure(s) shall comply with all applicable City requirements.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning; Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-HYD-8: Architectural Copper (#56)

Applicable To: All projects involving new architectural copper.

Requirement: The project applicant shall implement Best Management Practices (BMPs) concerning the installation, treatment, and maintenance of exterior architectural copper during and after construction of the project in order to reduce potential water quality impacts in accordance with Provision C.13 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The required BMPs include, but are not limited to, the following:

- a. If possible, use copper materials that have been pre-patinated at the factory;
- b. If patination is done on-site, ensure rinse water is not discharged to the storm drain system by protecting storm drain inlets and implementing one or more of the following:
 - c. Discharge rinse water to landscaped area;
 - d. Collect rinse water in a tank and discharge to the sanitary sewer, with approval by the City; or haul off-site for proper disposal;
 - e. During maintenance activities, protect storm drain inlets to prevent wash water discharge into storm drains; and
- f. Consider coating the copper with an impervious coating that prevents further corrosion.

When Required: During construction; ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-HYD-9: Vegetation Management on Creekside Properties (#57)

Applicable To: All projects located on creekside properties.

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-10: Creek Protection Plan (#58)

Applicable To: All projects requiring a category III or IV creek protection permit.

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.
- iii. 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.
- iv. 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.

- v. 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.
- vi. 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.
- vii. Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains.
- viii. Direct and locate tool and equipment cleaning so that wash water does not discharge into the creek.
- ix. 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.
- x. 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.
- xi. 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.
- xii. 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.
- xiii. 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).
- xiv. 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-11: Creek Dewatering/Diversion (#59)

Applicable To: All projects involving creek dewatering or diversion (generally required when there is work within the creek channel).

Requirement: The project applicant shall submit a Dewatering and Diversion Plan for review and approval by the City, and shall implement the approved Plan. The Plan shall comply, at a minimum, with the following:

- a. All dewatering and diversion activities shall comply with the requirements of all necessary regulatory permits and authorizations from other agencies (e.g., Regional Water Quality Control Board, California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and Army Corps of Engineers).
- b. All native aquatic life (e.g., fish, amphibians, and turtles) within the work site shall be relocated by a qualified biologist prior to dewatering, in accordance with applicable regional, state, and federal requirements. Captured native aquatic life shall be moved to the nearest appropriate site on the stream channel downstream. The biologist shall check daily for stranded aquatic life as the water level in the dewatering area drops. All reasonable efforts shall be made to capture and move all stranded aquatic life observed in the dewatered areas. Capture methods may include fish landing nets, dip nets, buckets, and by hand. Captured aquatic life shall be released immediately in the nearest appropriate downstream site. This condition does not allow the take or disturbance of any state or federally listed

species, nor state-listed species of special concern, unless the applicant obtains a project specific authorization from the California Department of Fish and Wildlife and/or the U.S. Fish and Wildlife Service, as applicable.

- c. If any dam or other artificial obstruction is constructed, maintained, or placed in operation within the stream channel, ensure that sufficient water is allowed to pass down channel at all times to maintain native aquatic life below the dam or other artificial obstruction.
- d. Construction and operation of dewatering/diversion devices shall meet the standards contained in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Control Board.
- e. Cofferdams and/or water diversion system shall be constructed of a non-erodible material which will cause little or no siltation. Cofferdams and the water diversion system shall be maintained in place and functional throughout the construction period. If the cofferdams or water diversion systems fail, they shall be repaired immediately based on the recommendations of a qualified environmental consultant. The devices shall be removed after construction is complete and the site is stabilized.
- f. Pumped water shall be passed through a sediment settling device before returning to the stream channel. Velocity dissipation measures are required at the outfall to prevent erosion.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning; Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-HYD-12: Structures in a Flood Zone (#60)

Applicable To: All projects that involve new construction within a 100-year flood zone as mapped on a Federal Hazard Boundary map, Flood Insurance Rate Map, or other flood hazard delineation map. Staff can refer to the City's GIS map.

Requirement: The project shall be designed to ensure that new structures within a 100-year flood zone do not interfere with the flow of water or increase flooding. The project applicant shall submit plans and hydrological calculations for City review and approval with the construction-related drawings that show finished site grades and floor elevations elevated above the Base Flood Elevation.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-HYD-13: Bay Conservation and Development Commission (BCDC) Approval (#61)

Applicable To: All projects that require a permit from the Bay Conservation and Development Commission (BCDC). BCDC's jurisdiction is generally limited to the first 100 feet inland from the shoreline of San Francisco Bay and the Oakland Estuary. Projects in BCDC's jurisdiction requiring a permit include placing material in the Bay/Estuary, dredging material from the Bay/Estuary, substantially changing the use of a structure or area, constructing or repairing a structure, or grading land.

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.

When Required: Prior to activity requiring permit/approval from BCDC

Initial Approval: Approval by BCDC; evidence of approval submitted to Bureau of Planning

Monitoring/Inspection: BCDC

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section describes environmental impacts related to hydrology and water quality, including coastal hazards that could result from the implementation of the Specific Plan and reasonably foreseeable development expected to occur under the Plan. The section begins with the criteria of significance that establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would have a significant impact related to hydrology and water quality if it would result in the following:

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 planned 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 significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
11. Expose people or structures to a significant risk of loss, injury or death involving 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 off-site.
13. Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources. [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.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statues and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Analysis and Findings

The following discusses the impacts of development under the Specific Plan, all of which are less than significant.

(1) Water Quality (Criterion 1)

Construction Period

Development expected to occur in the Plan Area over the next 20 years would include excavation and grading that could expose soils to erosion and sedimentation and involve the use of hazardous materials, such as fuels, oils, paints, solvents, and adhesives. If stormwater contacts disturbed soil and/or improperly stored hazardous materials, sediments and contaminants could

be entrained in stormwater runoff that could reach waterways and degrade water quality, potentially resulting in a violation of water quality standards. All future development would be subject to existing water quality regulations and programs, as described in the Regulatory Setting section above. Specifically, construction activities for future development projects under the Specific Plan that disturb more than 1 acre of land would be required to comply with the requirements of the Construction General Permit. In accordance with the Construction General Permit requirements, a SWPPP would be developed and implemented to identify all potential pollutants and their sources, including a list of BMPs to reduce discharges of construction-related stormwater pollutants. The SWPPP would include a detailed description of controls to reduce pollutants and outline maintenance and inspection procedures. The SWPPP would be required to be kept on-site and be made available to Water Board inspectors. Typical sediment and erosion BMPs include protecting storm drain inlets, establishing and maintaining construction exits, and perimeter controls. The SWPPP would also define proper building material staging areas, paint and concrete washout areas, proper equipment/vehicle fueling and maintenance practices, controls for equipment/vehicle washing, and allowable non-stormwater discharges, and would include a spill prevention and response plan.

All the other projects under Specific Plan (projects that don't require a grading permit, or a category III or IV creek protection permit) would be required to comply with SCA-HYD-1: Erosion and Sedimentation Control Measures for Construction (#48), which requires the project applicant to implement BMPs to reduce erosion, sedimentation, and water quality impacts during construction to the maximum extent practicable.

Dewatering, which may need to occur to support foundation construction and other activities related to future development projects under the Specific Plan, would generate effluent that would require special management. Dewatering effluent could have high turbidity (suspended sediment) and could contain other contaminants. Turbid or contaminated groundwater could cause degradation of the receiving water quality if discharged directly to storm drains without treatment. Any groundwater dewatering would be limited in duration and the discharge of dewatering effluent would be subject to permits from East Bay Municipal Utility District (EBMUD) or the Regional Water Board, depending if the discharge were to the sanitary or storm sewer system, respectively.

All projects involving construction activities that require a grading permit per Chapter 15.04.660 of Oakland Municipal Code would be required to comply with SCA-HYD-2: Erosion and Sedimentation Control Plan for Construction (#49). An Erosion and Sedimentation Control Plan, when properly implemented, would prevent excessive erosion and stormwater runoff of solid materials as a result of construction activities, which could otherwise degrade receiving water quality. All projects that disturb one acre or more of surface area would be required to comply with SCA-HYD-3: State Construction General Permit (#50). All projects involving new

architectural copper would be required to comply with SCA-HYD-8. Architectural Copper (#56). If future development projects under the Specific Plan were to be located on Creekside properties,³⁷ SCA-HYD-9: Vegetation Management on Creekside Properties (#57) would be applicable. SCA measures would prevent erosion and protect water quality prior to and during construction.

If future development projects under the Specific Plan would require a category III or IV creek protection permit,³⁸ SCA-HYD-10: Creek Protection Plan (#58) would be applicable.

SCA-HAZ-3: Hazardous Building Materials and Site Contamination (#44) requires that groundwater pumped from the subsurface to 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. If any project under the Specific Plan would involve work within the creek channel or involve work that requires creek dewatering or diversion, SCA-HYD-11: Creek Dewatering/Diversion (#59) would be applicable, which, when properly implemented, would prevent degradation of water quality in the creek as a result of construction activities.

Under existing State law, it is illegal to allow unpermitted non-stormwater discharges to receiving water. As stated in the Construction General Permit, non-storm water discharges directly to receiving waters or the storm drain system have the potential to negatively impact water quality. The discharger must implement measures to control all non-stormwater discharges during construction, and from dewatering activities associated with construction. Discharging any pollutant-laden water that would cause or contribute to an exceedance of the Basin Plan from a dewatering site or sediment basin into any receiving water or storm drain is prohibited (i.e., illegal).³⁹

³⁷ Creekside property means those properties located in Oakland, as identified by the Environmental Services Manager, as having a creek or riparian corridor crossing the property and/or are contiguous to a creek or riparian corridor.

³⁸ A Category III creek protection permit is required if any exterior development or work may adversely impact the creek, beyond the 20-foot setback from the top of bank of the creek, and is within one hundred (100) feet of the center line of the creek, that may or may not require any other development related permit, including without limitation: landscape walls, fences, patios, decks, private drainage improvements, irrigation systems, or trenching work. Additionally, any work or development that includes earthwork beyond the twenty (20) foot setback from the top of the bank of the creek.

A Category IV creek protection permit is required if any exterior development or work that is conducted from the center line of the creek to the twenty (20) foot setback from the top of bank of the creek, may or may not require any other development related permits including without limitation: earthwork, landscape walls, fences, patios, decks, private drainage improvements, irrigation systems, or trenching work.

³⁹ State Water Resources Control Board (SWRCB) Division of Water Quality, 2009. Construction General Permit Fact Sheet. 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ.

The Construction General Permit allows the discharge of non-contaminated dewatering effluent if the water is properly filtered or treated, using appropriate technology. These technologies include, but are not limited to retention in settling ponds (where sediments settle out prior to discharge of water) and filtration using gravel and sand filters (to mechanically remove the sediment). If the dewatering activity is deemed by the Regional Water Board not to be covered by the Construction General Permit, then the discharger could potentially prepare a Report of Waste Discharge, and if approved by the Regional Water Board, be issued site-specific Waste Discharge Requirements (WDRs) under the NPDES regulations. Site-specific WDRs contain rigorous monitoring requirements and performance standards that, when implemented, ensure that receiving water quality is not substantially degraded.

If the water is not suitable for discharge to the storm drain (receiving water), as discussed above, dewatering effluent may be discharged to EBMUD's sanitary sewer system if special discharge criteria are met. These include, but are not limited to, application of treatment technologies or BMPs which would result in achieving compliance with the wastewater discharge limits. Discharges to EBMUD's facilities must occur under a Special Discharge Permit. EBMUD manages the water it accepts into its facilities so that it can ensure proper treatment of wastewater at the treatment facility prior to discharge.

If it is infeasible to meet the requirements of the Construction General Permit, acquire site-specific WDRs, or meet the EBMUD Special Discharge Permit requirements, the construction contractor would be required to transport the dewatering effluent off-site for treatment.

Compliance with State and local regulations, as well as the SCAs listed above regarding stormwater and dewatering, would protect receiving water quality. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to water quality during construction.

Operational Period

During operation, the Specific Plan would create potential sources of polluted runoff associated with motor vehicle traffic and the use of fertilizers for landscaped areas. Pollutants that may be transported in runoff from parking areas and roadways include sediment, metals, organic compounds including diesel, gasoline, and oil, and trash and debris. Future development projects under the Specific Plan that create or replace 10,000 square feet or more of impervious surface

and special land use categories⁴⁰ that create or replace 5,000 square feet or more of impervious surface would be required to comply with the MRP requirements for LID source control, site design, stormwater treatment.

Hydromodification Management projects, as defined above under Regulatory Setting, would also be required to comply with hydromodification standard, which requires that stormwater discharges associated with regulated new development or redevelopment projects do not cause an increase in the erosion potential of the receiving stream over the existing condition, which would reduce potential impact related to water quality.

Regulated Projects under the Provision C.3⁴¹ would be required to comply with SCA-HYD-6: NPDES C.3 Stormwater Management Plan Required (#54), which requires the implementation of a Post-Construction Stormwater Management Plan and Maintenance Agreement to reduce excessive stormwater runoff and limit stormwater pollution through source control measures.

All other projects that are not Regulated Projects under the Provision C.3 would be required to comply with SCA-HYD-4: Site Design Measures to Reduce Stormwater Runoff (#52) and SCA-HYD-5: Source Control Measure to Limit Stormwater Pollution (#53) to reduce excessive stormwater runoff and limit stormwater pollution, respectively.

All projects that are not Regulated Projects under the Provision C.3 and create or replace at least 2,500 square feet, but less than 10,000 square feet, of new or existing impervious area, or individual single-family home projects that create or replace at least 2,500 square feet of new or existing impervious area, would be required to comply with SCA-HYD-7: NPDES C.3 Stormwater Requirements for Small Projects (#55), which requires the implementation of specific site design measures to reduce excessive stormwater runoff during operation.

All projects involving the use of external new architectural copper components (which can leach dissolved copper into stormwater runoff) would be required to comply with SCA-HYD-8: Architectural Copper (#56). If future development projects under the Specific Plan were to be located on Creekside properties,⁴² SCA-HYD-9: Vegetation Management on Creekside Properties (#57) would be applicable, which would prevent erosion and protect water quality after construction. If projects would require a category III or IV creek protection permit, SCA-HYD-10:

⁴⁰ Special land use categories include auto service facilities, retail gasoline outlets, restaurants, or stand-alone uncovered parking lots.

⁴¹ Regulated projects are those create or replace 10,000 square feet or more of impervious surface and special land use categories that create or replace 5,000 square feet or more of impervious surface.

⁴² Creekside property means those properties located in Oakland, as identified by the Environmental Services Manager, as having a creek or riparian corridor crossing the property and/or are contiguous to a creek or riparian corridor.

Creek Protection Plan (#58) would be applicable, which requires the implementation of post-construction BMPs.

Compliance with the MRP requirements, as well as the SCAs listed above regarding stormwater, would protect receiving water quality. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to water quality during operation.

(2) Depletion of Groundwater Resources (Criterion 2)

The Plan Area is mostly developed with impervious surfaces under existing conditions. The Specific Plan would not significantly alter the amount of impervious area, and therefore would not interfere substantially with groundwater recharge. As discussed above, dewatering may be performed during construction of future development projects under the Specific Plan. However, construction-related dewatering would be temporary and limited to the areas of future project sites and would not substantially contribute to depletion of groundwater supplies. A GSP or GWMP has not yet been developed for the portion of the Santa Clara Valley – East Bay Plain Groundwater Basin where the Plan Area is located.⁴³ Operation of new development projects under the Specific Plan would not involve dewatering or the use of groundwater as potable water would be supplied to each future project site by EBMUD.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to groundwater supplies or interference with groundwater recharge.

(3) Erosion and Siltation (Criterion 3)

Construction Period

Erosion and siltation could occur during construction of future projects under the Specific Plan because drainage patterns would be temporarily altered during construction activities due to excavation or grading activities. As discussed above under Criterion 1, impacts related to erosion and siltation during construction would be reduced to a less-than-significant level through compliance with the Construction General Permit, which requires preparation and implementation of a SWPPP including erosion and sediment control BMPs, as well as the following SCAs (with detailed description described under Criterion 1) SCA-HYD-1: Erosion and Sedimentation Control Measures for Construction (#48), SCA-HYD-2: Erosion and Sedimentation

⁴³ California Department of Water Resources, 2019c. Groundwater Information Center Interactive Map Application. Available at: <https://gis.water.ca.gov/app/gicima/>, accessed June 28, 2019.

Control Plan for Construction (#49), SCA-HYD-3: State Construction General Permit (#50), SCA-HYD-9: Vegetation Management on Creekside Properties (#57), and SCA-HYD-10: Creek Protection Plan (#58). Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to erosion and siltation during construction.

Operational Period

As discussed above, the southern portion of the Plan Area along the Estuary is exempt from hydromodification because it is located in tidally influenced or depositional area. In addition, the Plan Area is mostly developed with impervious surfaces under existing conditions and the proposed Specific Plan would not significantly alter the amount of impervious area. Therefore, operation of future projects, located within the southern portion of the Plan Area, would have less-than-significant impacts related to erosion and siltation.

However, the middle and northern portions of the Plan Area may be susceptible to hydromodification, indicating potential impacts related to erosion and siltation could occur. As discussed above under Criterion 1, Hydromodification Management projects (regulated projects that create and/or replace 1 acre of more of impervious surface) would be required to comply with hydromodification standard, except those projects that can demonstrate that one of the three exceptions applies: 1) impervious surface area to be same or less than pre-project condition; 2) the catchment of the project drains to a hardened engineered channel or enclosed pipes, or channels that are tidally influenced; or 3) the catchment or subwatershed of the project is highly developed. Projects that can demonstrate that one of the three exceptions apply would have less-than-significant impacts related to erosion and siltation, as discussed in the paragraph above. For the Hydromodification Management projects, hydromodification standard requires that stormwater discharges associated with regulated new development or redevelopment projects do not cause an increase in the erosion potential of the receiving stream over the existing condition. Increases in runoff rate and volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

In addition, as discussed above under Criterion 1, the following SCAs (with detailed description described under Criterion 1) would reduce impacts related to erosion and siltation: SCA-HYD-4: Site Design Measures to Reduce Stormwater Runoff (#52), SCA-HYD-5: Source Control Measure to Limit Stormwater Pollution (#53), SCA-HYD-6: NPDES C.3 Stormwater Management Plan Required (#54), SCA-HYD-7: NPDES C.3 Stormwater Requirements for Small Projects (#55), SCA-HYD-9: Vegetation Management on Creekside Properties (#57), and SCA-HYD-10: Creek Protection Plan (#58).

Compliance with the MRP requirements and the SCAs described above would ensure that potential impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to erosion and siltation during operation.

(4) Flooding Associated with Changing Drainage Patterns (Criterion 4)

Since the Plan Area is relatively flat and already largely covered with impervious surfaces, substantial changes to drainage patterns and potential increases in flooding are not anticipated. Existing stormwater regulations regarding post-construction stormwater requirements under the MRP include stormwater control and treatment requirements for new development creating or replacing more than 10,000 square feet of impervious surface, and special land use categories that create or replace 5,000 square feet or more of impervious surface.⁴⁴ Implementation of these stormwater controls would slow runoff rates with the goal of maintaining predevelopment runoff rates.

In addition, compliance with the following City's SCAs (with detailed description described under Criterion 1) would minimize potential impacts related to flooding associated with changing drainage patterns: SCA-HYD-4: Site Design Measures to Reduce Stormwater Runoff (#52), SCA-HYD-6: NPDES C.3 Stormwater Management Plan Required (#54), SCA-HYD-7: NPDES C.3 Stormwater Requirements for Small Projects (#55), SCA-HYD-9: Vegetation Management on Creekside Properties (#57), and SCA-HYD-10: Creek Protection Plan (#58), which requires that project shall not result in substantial increase in stormwater runoff volume or velocity to the creek or storm drains.

Compliance with the MRP requirements, as well as the SCAs described above, would ensure that potential impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to flooding associated with changing drainage patterns.

(5) Contribution to Polluted Runoff or Exceeding Storm Drain System Capacity (Criteria 5 and 6)

Reasonably foreseeable development associated with the Specific Plan would result in more intense use of the land, potentially resulting in increased pollutant loading of stormwater runoff and/or hydromodification impacts (degradation of water quality in creeks related to higher erosive flows). Construction activities, operation of new development projects, landscaping

⁴⁴ Special land use categories include auto service facilities, retail gasoline outlets, restaurants, or stand-alone uncovered parking lots.

practices and associated changes in runoff patterns also have the potential to introduce contaminants to stormwater.

In areas of active construction, soil erosion may result in discharges of sediment-laden stormwater runoff into the City stormwater system, if not properly controlled, which could contribute to degradation of downstream water quality and impairment of beneficial uses. Sediment can also be a carrier for other pollutants, such as heavy metals, nutrients, pathogens, oil and grease, fuels and other petroleum products. In addition to sediment, other pollutants associated with the various phases of construction, such as trash, paint, solvents, sanitary waste from portable restrooms, and concrete curing compounds, could be discharged into and impair receiving waters, if released during construction.

Development under the Specific Plan may result in new sources of various operation-period stormwater pollutants that may be deposited on impervious surfaces, such as sediment, metals, organic compounds such as pesticides, polynuclear aromatic hydrocarbons and oil and grease, pathogens, nutrients, and trash and debris. Such pollutants may also be present in non-stormwater discharges, such as runoff from irrigation and residential car washing. If not properly controlled, the discharges of these pollutants into receiving waters could adversely affect water quality and beneficial uses.

As described in detail above, existing stormwater regulations regarding construction and post-construction stormwater requirements under the Construction General Permit and MRP, respectively, include requirements for new development. In addition, compliance with SCAs would also reduce potential impacts associated with substantial runoff to exceed existing drainage capacity or result in polluted runoff. Specifically, the following SCAs (with detailed description described under Criterion 1) would apply during construction: SCA-HYD-1: Erosion and Sedimentation Control Measures for Construction (#48), SCA-HYD-2: Erosion and Sedimentation Control Plan for Construction (#49), SCA-HYD-3: State Construction General Permit (#50), SCA-HYD-9: Vegetation Management on Creekside Properties (#57), and SCA-HYD-10: Creek Protection Plan (#58).

The following SCAs (with detailed description described under Criterion 1) would apply during operation: SCA-HYD-4: Site Design Measures to Reduce Stormwater Runoff (#52), SCA-HYD-5: Source Control Measure to Limit Stormwater Pollution (#53), SCA-HYD-6: NPDES C.3 Stormwater Management Plan Required (#54), SCA-HYD-7: NPDES C.3 Stormwater Requirements for Small Projects (#55), SCA-HYD-9: Vegetation Management on Creekside Properties (#57), and SCA-HYD-10: Creek Protection Plan (#58).

Further, the Specific Plan contains the following policies designed to address stormwater runoff and minimize the potential for associated pollution effects:

Policy CH-2.4: Require new developments to install and maintain low-impact stormwater detention systems on private property to limit the amount of runoff into drains or surface water bodies including Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary.

Low-impact stormwater management is an approach that protects, restores, or mimics the natural water cycle. In addition to improving San Francisco Bay water quality, low-impact stormwater management provides other benefits, such as the creation/protection of public open space, reduced heat-island effect, improved air quality, and reduced flood risks.

This requirement reinforces provision C.3 of the San Francisco Bay Region MRP, which requires stormwater site design measures be included as part of redevelopment projects of a certain size (projects with 10,000 square feet or more of new or existing impervious area; or 5,000 square feet or more for certain land uses). Only LID measures are allowed for most regulated projects.

The site design measures used in downtown should be calibrated with the envisioned environment of the Specific Plan. The City's Public Works Department and Planning Bureau should work together to create a toolkit of approaches (green roofs, cisterns and rain barrels, rain gardens, bioswales, permeable paving surfaces, etc.) that are contextually appropriate within each District. Public Works would then formulate calculations for each tool to be able to evaluate the success of design and development proposals.

Policy CH-2.10: Develop a Green Infrastructure Plan for downtown to improve social, environmental, and economic resilience outcomes with standards and guidelines for the integration of low-impact design elements for all public realm and capital improvement projects downtown.

In addition to green stormwater infrastructure and its benefits mentioned above, the Green Infrastructure Plan would identify areas of opportunity and standards for inclusion in public capital improvement projects, such as streetscape, public space, habitat protection and wildlife corridors, and park enhancements, as well as transportation projects and community engagement and education.

Opportunity areas for Green Infrastructure projects will be informed by multiple criteria, such as the ability to meet regulatory requirements, cost efficiency, space availability, and equity considerations. The Green Infrastructure Plan will prioritize the sites that would have the most urgent and severe impact by climate change. Not only would the Green Infrastructure Plan ensure that the City complies with Clean Water Act requirements, it will also be a multi-faceted guide for the City's Green Infrastructure efforts. Green Infrastructure design and implementation guidance for the inclusion of green infrastructure in public open space and transportation projects

should be incorporated into the public open space and thoroughfare standards within a new proposed zoning system.

Policy CH-211: Prioritize the design and implementation of green streets that incorporate trees, landscaping and permeable surfaces to sequester carbon, reduce noise pollution, buffer pedestrians from cars, and manage stormwater, water and air quality. Incorporate the recommendations of the *Oakland 50 Year Urban Forest Master Plan* (expected completion 2020).

All streetscape improvements in the Plan Area should explore potential for including green infrastructure and permeable surfaces to meet community health and placemaking goals. For example, the proposed “Green Loop” passes through and connects many of downtown’s districts and neighborhoods, creating a connected network of walking and biking paths. As the streets that form this loop are reconfigured to include enhanced pedestrian and bicycle facilities, street trees, green infrastructure, and permeable materials can also be included as part of the street design. Unless prohibited by utilities, underground infrastructure or other constraints, “green” design elements should be included.

Compliance with requirements under the Construction General Permit and MRP, the SCAs described above, and the policies in the Specific Plan would ensure that potential impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to contribution to polluted runoff or exceeding storm drain system capacity.

(6) Other Water Quality Degradation Impacts (Criterion 7)

Development under the Specific Plan could result in water quality degradation, as described in “Contribute Runoff Water or Polluted Runoff”, above. Compliance with NPDES permit requirements, the Specific Plan policies, and SCAs identified above would ensure that impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to water quality degradation. No other potential water quality degradation impacts have been identified.

(7) Impede or Redirect Flood Flows, or Expose People or Structures to Flooding Risks (Criteria 8, 9, and 10)

As shown in Figure V.J-1, a small eastern portion of the Plan Area along Lake Merritt and the southern portion of the Plan Area along the Estuary are located within a FEMA-designated one percent annual chance (100-year) Flood Hazard Zone. Future projects under the Specific Plan, if located in a 100-year flood zone, would be required to comply with SCA-HYD-12: Structures in a Flood Zone (#60), which requires that new structures do not interfere with the flow of water or increase flooding. SCA-HYD-12 also requires the project applicant to submit plans and

hydrological calculations to ensure finished site grades and lowest floors are elevated above the Base Flood Elevation, which would protect people and structures from flooding.

The Oakland General Plan contains the following policy and actions to address flooding impacts related to coastal hazards:

Policy FL-4: Minimize further the relatively low risks from non-storm-related forms of flooding.

- Action FL-4.3: Inform shoreline-property owners of the possible long-term economic threat posed by rising sea levels.
- Action FL-4.4: Stay informed of emerging scientific information on the subject of rising sea levels, especially on actions that local jurisdictions can take to prevent or mitigate this hazard.

Further, dam or reservoir failure could result in downstream flooding. As shown in Figure V.J-2, the northeastern corner of the Plan Area is designated as a dam failure inundation area of the Upper Edwards, Lower Edwards, and Piedmont reservoirs. Both Lower Edwards and Upper Edwards reservoirs were removed from the jurisdiction of the Division of Safety of Dams in 1983 because their capacity does not reach regulatory thresholds, and therefore not considered a significant threat. The Piedmont dam is within jurisdiction of the State of California and the condition assessment rating is satisfactory, indicating no existing or potential dam safety deficiencies are recognized.⁴⁵ In addition, the Oakland General Plan contains the following policy and actions to address impacts related to dam failure:

Policy FL-4: Minimize further the relatively low risks from non-storm-related forms of flooding.

- Action FL-4.1: Request from the state Division of Safety of Dams a timeline for the maintenance inspection of all operating dams in the city.
- Action FL-4.2: Review for adequacy, and update if necessary, procedures adopted by the city pursuant to the Dam Safety Act for the emergency evacuation of areas located below major water-storage facilities.

Compliance with SCA-HYD-12: Structures in a Flood Zone (#60), General Plan Policy FL-4, and related actions would ensure that impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to potential flooding.

⁴⁵ State of California, California Natural Resources Agency, Department of Water Resources, Division of Safety of Dams, 2018. Dams Within Jurisdiction of the State of California, September.

(8) Inundation by Seiche, Tsunami, or Mudflow (Criterion 11)

Analysis of the effects of inundation associated with seiche, tsunami, mudflow, and sea level rise on the Plan Area is not required under CEQA because these would represent impacts of the environment on the project. As such, this Draft EIR presents considerations of impacts on the Plan Area due to inundation associated with seiche, tsunami, mudflow, or sea level rise for informational purposes only, and no significance determination is made based upon the analysis.

Seiche

As discussed in the setting section above seiche occurrence in the Plan Area is not considered to be a viable hazard. It is possible (though no documented case has ever occurred) that a seiche in an upland reservoir could cause downstream flooding that would be caused by water overtopping a dam. This hazard, while considered to be an extremely low probability event, would mimic the catastrophic dam failure inundation hazard (discussed above under Criterion 6).

Tsunami

As discussed in the setting section above, portions of the Plan Area along the Estuary are located within a potential Tsunami Inundation Area, as mapped by the California Emergency Management Agency, California Geological Survey, and the Tsunami Research Center at the University of Southern California.⁴⁶ The Oakland General Plan concludes that 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.

Mudflow

Mudflows are a type of landslide, which can occur on sloping terrain. The Plan Area vicinity is relatively flat and therefore not subject to impacts related to mudslides.

Sea Level Rise

As discussed in the setting section above, Lake Merritt and portions of the Plan Area along the estuary could be susceptible to frequent inundation under various future sea level rise scenarios. The Specific Plan characterizes the sea level rise issue in downtown as follows:

For downtown, it is clear that mitigating the potential effects of future flooding from sea-level rise needs to be a high priority. Projected long-term sea-level rise poses a direct threat to the

⁴⁶ California Emergency Management Agency (CEMA), 2009. Tsunami Inundation Map for Emergency Planning, Oakland West Quadrangle, July 31.

Jack London Waterfront, Oakland Estuary, Lake Merritt, and Oakland's overall stormwater system. Therefore, with investments being made in Estuary Park, Jack London Square and Brooklyn Basin, as well as the future potential of sites like Howard Terminal and Victory Court, it is vital to prepare a comprehensive adaptation strategy for downtown. (page 222).

All projects that require a permit from the BCDC (those projects within 100 feet of the shoreline) would be required to comply with SCA-HYD-13: Bay Conservation and Development Commission (BCDC) Approval (#61), which requires the project applicant to obtain necessary permit approval from BCDC to ensure that the project addresses potential sea level rise. BCDC generally requires larger waterfront projects to be designed to address mid-century sea level conditions and be able to adapt to end of century conditions.

As described in the setting discussion above, the City has been working on developing a strategy to address sea level rise. The Preliminary Sea Level Rise Road Map (Road Map)⁴⁷ document was developed as part of Resilient Oakland, a coordinated effort to align resources, plans, and actions in support of a thriving and resilient community. The process that led to the development of the Road Map included collaboration of a working group that met in June and August 2016.

The Specific Plan addresses sea level rise, in part, with the following policies:

Policy CH-2.3: Support the implementation of the Sea Level Rise Roadmap, which identified key actions needed to prepare for impacts of climate change; critical assets that should be prioritized for safety and resilience to SLR and flood risk, particularly for vulnerable neighborhoods; and identified policy regulations and data analysis systems that can support decision making around land use, building, and zoning.

Policy CH-2.5: Make available to potential developers up-to date mapping of predicted sea level rise (SLR) inundation areas in the Downtown Plan Area based on best available science, a continued high emissions scenario, and appropriate risk tolerance level.

Policy CH-2.6: Require applicants proposing to develop in a future inundation area (as depicted on Figure CH-4) to conduct a SLR vulnerability assessment for the project, prepare project designs accordingly, and submit the assessment and conceptual design to the City for review and approval.

Policy CH-2.7: Develop designs for a suite of shoreline protection measures, protective setbacks and other adaptation strategies, to be incorporated into future development projects.

Policy CH-2.8: Re-evaluate both Bay flooding and watershed flooding potential at key milestones in the specific plan's 20-year implementation horizon, to manage for changing sea level rise projections.

⁴⁷ City of Oakland, 2017. Oakland Preliminary Sea Level Rise Road Map, Fall.

Policy CH-2.9: Prepare a sea level rise strategy for the Plan Area as part of a regional strategy to address rising water levels in the San Francisco Bay, and should be coordinated with the City's broader climate adaptation efforts.

The Sea Level Rise Roadmap document summarizes existing impacts and future impacts of SLR; relevant policies and regulations; and vulnerability and risk assessments conducted to date, including mapping critical assets and identifying vulnerable communities to bring an equity lens and voice to the people who are most impacted. It also identifies priority actions.

The Specific Plan would provide guidance on linking development, land use, transportation, economic development, housing, public spaces, culture, arts, and social equity to achieve a vibrant future for the downtown area. As part of development under the Specific Plan, the City is facilitating opportunities for the public to determine the future of Oakland's downtown waterfront community, including adaptive management for SLR. The Plan Area includes the Jack London District, which is particularly vulnerable to SLR, as well as the west side of Lake Merritt and the channel. Implementation of Policies CH-2.3, 2.5, 2.6, 2.7, 2.8 and, 2.9 would require new development projects to incorporate adaptive management strategies for SLR and storm surge, where appropriate. The Specific Plan would also consider SLR in infrastructure and land use decisions. The City will collaborate with regional groups in developing language and strategies to guide implementation of the Plan's SLR components.

To ensure that the Road Map priority action that is directly relevant to the Plan Area is implemented when considering reasonably foreseeable development expected to occur in the Plan Area over the next 20 years, we recommend implementing the Specific Plan Policies related to Sea Level Rise.

Recommendation Hydro-1: Implement SLR Policies CH-2.3, 2.5, 2.6, 2.7, 2.8, and 2.9.

The vulnerability assessment proposed in CH-2.6 shall not only consider still water sea level rise projections, but also consider inundation hazards associated with storm surge, wave action, and extreme high tides

(9) Release of Pollutants Due to Project Inundation (Criterion 12)

There is potential for project inundation to occur during construction and operation of the Specific Plan from flood hazard, tsunami, seiche, and sea level rise. As discussed in the setting section above, a small eastern portion of the Plan Area along Lake Merritt and the southern portion of the Plan Area along the Lake Merritt Estuary are located within a FEMA-designated one percent annual chance (100-year) Flood Hazard Zone. Portions of the Plan Area along the estuary are also located within a potential Tsunami Inundation Area. It is possible (though no documented case has ever occurred) that a seiche in an upland reservoir could cause downstream

flooding that would be caused by water overtopping a dam. The northeastern corner of the Plan Area is designated as being within the dam failure inundation area of the Upper Edwards, Lower Edwards, and Piedmont reservoirs. In addition, portions of the Plan Area along the estuary would be permanently inundated under both the 48-inch and 72-inch sea level rise scenarios.

During construction, development under the Specific Plan would involve the use of hazardous materials such as fuels, oils, paints, solvents, and adhesives. In addition, handling of contaminated soils may be performed during construction in the Plan Area. As discussed above under Criterion 1, compliance with State and local regulations, as well as applicable SCAs (SCA-HYD-1, 3, 8, 9, 10, and 11, and SCA-HAZ-3), would ensure that hazardous materials and contaminated soils are properly managed and stored to protect receiving water quality. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the release of pollutants during construction as a result of inundation by flood hazard, tsunami, seiche, or sea level rise.

During project operation, urban pollutants associated with development under the Specific Plan would generally include oils, fuels, and metals associated with motor vehicle traffic; fertilizers and pesticides used to maintain landscaped areas; and trash generated by new site occupants. These pollutants that could be encountered by flood waters in the Plan Area would be similar to the urban pollutants found in the streets and buildings currently within and surrounding the Plan Area. Even without the occurrence of flooding, such pollutants are carried to surface waters by stormwater runoff from the Plan Area and its vicinity during any storm large enough to generate overland flows and flows to storm drains. The levels of urban pollutants occurring within the Plan Area would be minimized through compliance with the MRP requirements, as well as applicable SCAs (SCA-HYD-4, 6, 7, 8, 9, and 10). Specific development projects within the Plan Area could involve the storage and handling of hazardous materials within flood hazard zones and areas subject to inundation in the future due to sea level rise. Compliance with Recommendation Hydro-2 would ensure that such development projects would be constructed above predicted flooding elevations; hazardous materials that may be stored during operation of such development projects would not be released into flood waters. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the release of pollutants during operation as a result of inundation by flood hazard, tsunami, seiche, or sea level rise.

(10) City of Oakland Creek Protection Ordinance (Criterion 13)

Each development project under the Specific Plan would be required to comply with the City of Oakland Creek Protection Ordinance and applicable creek protection SCAs (SCA-HYD-9, 10, and 11). Therefore, impacts associated with implementation of the Specific Plan and reasonably

foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to conflicts with the City of Oakland Creek Protection Ordinance.

c. Cumulative Hydrology and Water Quality Impacts

The geographic area of concern for cumulative hydrology and water quality impacts is the Plan Area, the watersheds encompassing the Plan Area, and the receiving water bodies, primarily Glen Echo Creek, Lake Merritt, the Estuary, and the San Francisco Bay. As these water bodies (except Glen Echo Creek) are currently designated as “impaired” by the State Water Board, a cumulative water quality impact related to particular pollutants is currently occurring. Many of the pollutants for which the local water bodies are considered impaired are related to legacy pollutants⁴⁸ that are no longer in use (and therefore would not be used within the Plan Area) but persist in the environment. For example, DDT was banned in the United States in 1972, but residual amounts of DDT persist in soils and surface water bodies in the Bay Area.

To address cumulative water quality impacts, stormwater regulations have become progressively more stringent since the passage of the federal CWA, and the continued evolution of NPDES permits which now require new development and redevelopment projects to manage and treat all significant sources of stormwater pollutants and reduce runoff rate and volume. NPDES permit requirements apply to the cumulative projects as well as that would be implemented under the Specific Plan. As such, a reduction in runoff and overall pollutant loads in stormwater in the vicinity of the Plan Area is anticipated over time, thereby reducing cumulative impacts. As all specific development projects within the Plan Area would be required to comply with NPDES programs and applicable SCAs, the Specific Plan’s contribution related to future projects would not be cumulatively considerable.

The Plan Area is mostly developed with impervious surfaces under existing conditions. Therefore, changes in drainage patterns (i.e., runoff volumes and rates) would not be substantial under the Specific Plan. In addition, SCA-HYD-12: Structures in a Flood Zone (#60) (which would apply to projects proposed to be constructed within a designated 100-year flood hazard zone) specifies that the project must be designed to ensure that new structures within a 100-year flood zone do not interfere with the flow of water or increase flooding. SCA HYD-12 states that the project applicant must submit plans and hydrological calculations for City review and approval with the construction-related drawings that show finished site grades and floor elevations elevated above the Base Flood Elevation. Due to the nature of the Plan Area (i.e., relatively flat and already

⁴⁸ Legacy pollutants are those that are primarily the result of historical contributions. They are pollutants that were used in the development of Northern California’s industries before their negative aspects were understood. Legacy pollutants stem from agricultural, manufacturing, and mining activities no longer practiced and include some pollutants currently banned by regulation.

covered with impervious surfaces) and the requirement of projects within the 100-year flood hazard zone to be designed to ensure no adverse changes to flooding conditions, the potential impact related to flooding would not be cumulatively considerable.

Portions of the Plan Area and other cumulative projects could be inundated due to flooding, tsunami, seiche, or sea level rise. Areas along Lake Merritt and the estuary are within the FEMA-designated 1 percent annual chance (100-year) Flood Hazard Zone; some portions of the area along the estuary are located within a potential Tsunami Inundation Area; the northeastern corner of the Plan Area is designated as being within a dam failure inundation area, which could cause downstream flooding if a seiche occurs; portions of the area long the estuary are subject to inundation as a result of sea level rise. The construction and operation of development under the Specific Plan and other cumulative projects in the City of Oakland are subject to State regulations (Construction General Permit and MRP), and the City's SCAs regarding stormwater, creek protection, and flooding. Therefore, the potential of the Specific Plan and cumulative projects to release a substantial amount of pollutants to local waters as a result of flooding, tsunami, seiche, or sea level rise is less than significant.

As discussed under Criterion 2, development expected to occur in the Plan Area is not anticipated to deplete groundwater recharge. Therefore, the Specific Plan would not have a cumulatively considerable impact related to impeding groundwater recharge.

Cumulative impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to hydrology and water quality.

K. NOISE

This section analyzes potential impacts on the ambient noise environment that could occur as a result of adoption and development under the Specific Plan. This section describes the environmental and regulatory setting of the Plan Area as well as the basics of environmental acoustics, including definitions of terms commonly used in noise analysis. The Specific Plan policies and City Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified. No additional mitigation measures were determined necessary.

1. Setting

The following discussion provides background information on noise and vibration and summarizes the existing noise environment.

a. Technical Background

(1) General Information on Noise

Noise is defined as unwanted sound that annoys or disturbs people and that can have an adverse psychological or physiological effect on human health. Sound is measured in units of decibels (dB) on a logarithmic scale. Decibels describe the purely physical intensity of sound based on changes in air pressure, but cannot accurately describe sound as perceived by the human ear, which is only capable of hearing sound within a limited frequency range. Thus, to obtain a single number that better characterizes the noise level perceived by a human ear, a decibel scale called A-weighting (dBA) is typically used. On this scale, the low and high frequencies are given less weight than the middle frequencies. Decibels and other technical terms are defined in Table V.K-1. Typical A-weighted noise levels at specific distances are shown for different noise sources in Table V.K-2.

In an unconfined space, such as outdoors, noise attenuates with distance. Noise levels at a known distance from point sources are reduced by 6 dBA for every doubling of that distance for hard surfaces (e.g., cement or asphalt) and by 7.5 dBA for every doubling of distance for soft surfaces (e.g., undeveloped or vegetative).¹ Noise levels at a known distance from line sources (e.g., roads, highways, and railroads) are reduced by 3 dBA for every doubling of the distance for hard surfaces and 4.5 dBA for every doubling of distance for soft surfaces. Greater decreases in noise levels can result from the presence of intervening structures or buffers.

¹ California Department of Transportation (Caltrans), 1998. Technical Noise Supplement: A Technical Supplement to the Traffic Noise Analysis Protocol.

TABLE V.K-1 DEFINITION OF ACOUSTICAL TERMS

Term	Definition
Decibel (dB)	A unit describing the amplitude of sound on a logarithmic scale. Sound described in decibels is usually referred to as sound or noise “level.” This unit is not used in this analysis because it includes frequencies that the human ear cannot detect.
Frequency (Hz)	The number of complete pressure fluctuations per second above and below atmospheric pressure.
A-Weighted Sound Level (dBA)	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound, in a manner similar to the frequency response of the human ear, and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted.
Equivalent Noise Level (L_{eq})	The average A-weighted noise level during the measurement period. For this CEQA evaluation, L_{eq} refers to a 1-hour period unless otherwise stated.
Community Noise Equivalent Level (CNEL)	The average A-weighted noise level during a 24-hour day, obtained after addition of 5 decibels to sound levels during the evening from 7:00 to 10:00 p.m. and after addition of 10 decibels to sound levels during the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level (L_{dn})	The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to sound levels during the night between 10:00 p.m. and 7:00 a.m.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Vibration Decibel (VdB)	A unit describing the amplitude of vibration on a logarithmic scale.
Peak Particle Velocity (PPV)	The maximum instantaneous peak of a vibration signal.
Root Mean Square (RMS) Velocity	The average of the squared amplitude of a vibration signal.

Source: Charles M. Salter Associates, Inc., 1998. Acoustics – Architecture, Engineering, the Environment, William Stout Publishers. Federal Transit Administration, 2018. Transit Noise and Vibration Impact Assessment Manual, FTA Report No.0123, September.

A typical method for determining a person’s subjective reaction to a new noise is by comparing it to existing conditions. The following describes the general effects of noise on people:²

- A change of 1 dBA cannot typically be perceived except in carefully controlled laboratory experiments.
- A 3-dBA change is considered a just-perceivable difference.

² Charles M. Salter Associates, Inc., 1998. Acoustics – Architecture, Engineering, the Environment, William Stout Publishers.

TABLE V.K-2 TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

Noise Source (Distance in Feet)	A-Weighted Sound Level in Decibels (dBA)
Jet Aircraft (200)	112
Subway Train (30)	100
Truck/Bus (50)	85
Vacuum Cleaner (10)	70
Automobile (50)	65
Normal Conversation (3)	65
Whisper (3)	42

Source: Charles M. Salter Associates Inc., 1998. Acoustics - Architecture, Engineering, the Environment, William Stout Publishers.

- A minimum of 5-dBA change is required before any noticeable change in community response is expected.
- A 10-dBA change is subjectively perceived as approximately a doubling or halving in loudness.

Because sound pressure levels are based on a logarithmic scale, they cannot be simply added or subtracted. For instance, if one noise source emits a sound level of 90 dBA and a second source is placed beside the first and also emits a sound level of 90 dBA, the combined sound level is 93 dBA, not 180 dBA. When the difference between two noise levels is 10 dBA or more, the amount to be added to the higher noise level is zero. In such cases, no adjustment factor is needed because adding in the contribution of the lower noise source makes no perceptible difference in what people can hear or measure. For example, if one noise source generates a noise level of 95 dBA and another noise source is added that generates a noise level of 80 dBA, the higher noise source dominates and the combined noise level will be 95 dBA.

(2) General Information on Groundborne Vibration

Vibration is an oscillatory motion through a solid medium in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. Several different methods are used to quantify vibration. Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors to vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment. Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or as root-mean-square (RMS) velocity. PPV is defined as the

maximum instantaneous peak of the vibration signal, while the RMS value can be considered an average value over a given time interval. PPV is appropriate for evaluating potential damage to buildings, but it is not suitable for evaluating human response to vibration because it takes the human body time to respond to vibration signals. The response of the human body to vibration is dependent on the average amplitude of a vibration. Thus, RMS is more appropriate for evaluating human response to vibration. PPV and RMS are normally described in units of inches per second (in/sec), and RMS is also often described in vibration decibels (VdB).

(3) General Information on Groundborne Noise

Groundborne vibration can transmit energy into buildings and structures. This vibration can cause a rumbling sound and audible noise within the buildings, which is referred to as groundborne noise. Like noise that travels through the air, groundborne noise is usually measured in decibels (dB or dBA). Groundborne noise is typically dominated by low-frequency components, and the non-linearity of human hearing causes sounds dominated by low-frequency components to seem louder than higher-frequency sounds with the same sound level.³ As a result, groundborne noise has the potential to disturb people at lower sound levels than broadband noise.

The relationship between groundborne vibration and groundborne noise depends on the frequency content of the vibration. For example, the groundborne noise measured in dBA will be approximately 40 dBA less than the groundborne vibration measured in VdB if the spectrum peak is around 30 Hz, and 25 dBA lower if the spectrum peak is around 60 Hz. Environmental vibration is rarely of sufficient magnitude to be perceptible or cause audible groundborne noise unless there is a specific vibration source close by, such as a railroad line.

b. Local Noise Environment

The local noise and vibration environment within the Plan Area, including sensitive receptors and existing conditions, is described below.

(1) Noise-sensitive Receptors

The Noise Element of the Oakland General Plan defines noise-sensitive receptors as land uses whose purpose and function can be disrupted or jeopardized by noise. Noise-sensitive receptors include residences, schools, churches, hospitals, elderly-care facilities, hotels, libraries, and certain types of passive open space that contain recreational facilities or development, required in association with residential development, such as seating areas or barbeque areas.⁴⁵

³ Federal Transit Administration (FTA), 2018. Transit Noise and Vibration Impact Assessment Manual, FTA Report No.0123, September.

⁴ Passive open space is generally undeveloped and covered with vegetation.

The current land uses within the Plan Area are described in *Section V.A, Land Use and Planning*, and are shown in Figure V.A-1. There are noise-sensitive receptors located within the Plan Area. The description below presents more thorough examples of noise-sensitive receptors that are located within the Plan Area.

Residences within the Plan Area are predominately located in Uptown, Koreatown/Northgate (KONO), West of San Pablo, Lakeside, Old Oakland, and Jack London, although there are residential facilities in each district of the Plan Area. The Plan Area also includes a scattering of parks and open space with recreational opportunities. For further discussion on parks and open space with recreational opportunities, refer to *Section V.A, Land Use and Planning* and *Section V.M, Public Services, Facilities, and Recreation*. Locations for residences and open space are shown in Figure V.A-1 of *Section V.A, Land Use and Planning*.

The following schools are located within the Plan Area:

- Oakland School for the Arts (530 18th Street);
- Envision Academy for Arts & Technology (1515 Webster Street);
- Smalltrans Depot Daycare (111 Grand Avenue);
- Little Stars Preschool (169 14th Street);
- New Day Preschool and Learning Center (460 West Grand Avenue);
- Starlight Child Development Center (246 14th Street);
- Laney Children's Center (286 East 10th Street);
- Bright Future Early Learning (1515 Clay Street); and
- Laney College (900 Fallon Street).

The Plan Area also includes other noise-sensitive receptors, such as churches, hotels, elderly-care facilities, and libraries. There are no hospitals within the Plan Area. The closest hospital is Alta Bates Summit Medical Center, located at 350 Hawthorne Avenue, north of the Plan Area.

(2) Existing Noise Sources and Levels

The primary source of noise within the Plan Area is auto and truck traffic on roadways and highways (including Interstate (I-) 980 in the west portion of the Plan Area and I-880 in the south portion of the Plan Area) and trains using railroad/Bay Area Rapid Transit (BART) rights-of-way within and near the Plan Area.⁶ Existing traffic volumes for roadways, I-980, and I-880 segments that are within the Plan Area (Appendix F of the transportation section) were used to generate a

⁵ City of Oakland, 2005. City of Oakland General Plan, Noise Element, March.

⁶ As indicated in the Noise Element of the General Plan, the major noise sources in Oakland are transportation activities. Although more night life has developed since the Noise Element was prepared, noise from nightlife would not generate sufficient noise to affect the city's overall noise environment and therefore is not discussed here.

noise contour map (Figure V.K-1) for the Plan Area. As indicated in Figure V.K-1, both I-980 and I-880 would generate noise levels of approximately 75 dBA L_{dn} or more near the highway alignments. However, roadway traffic noise from highways attenuates rapidly with distance and noise levels would be below 65 dBA L_{dn} one block from the alignments. Based on the railroad/BART noise contours in the City of Oakland General Plan, railroad/BART would generate approximately 70 dBA or more near their tracks and 60 dBA L_{dn} two blocks from the tracks.⁷

The local noise environment was further characterized by conducting a noise monitoring survey for this Draft EIR analysis. On March 29 2019, Baseline Environmental Consulting (BASELINE) measured short-term (15-minute) noise levels at six locations within the Plan Area to characterize the ambient noise levels. A Casella CEL-633C1 noise meter was used for the noise level measurements. The meter was calibrated before the measurements to ensure accuracy. The measurement locations are shown on Figure V.K-2. The numerical summaries of the ambient noise level measurements are provided in Table V.K-3.

Ambient noise levels are generally higher when locations are closer to highway sources. As indicated in Table V.K-3, ambient noise levels within the Plan Area are below 65 dBA L_{eq} when the locations are at least one block away from highway sources. The findings are generally consistent with the noise modeling results.

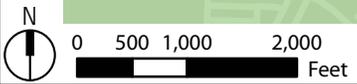
c. Local Vibration Environment

(1) Vibration-sensitive Receptors

According to the Federal Transit Administration (FTA), vibration-sensitive receptors can be divided into four categories. Each type of vibration-sensitive receptors within the Plan Area is discussed below:

- *Special Buildings*: This category includes facilities that are very sensitive to vibration and noise, such as concert halls, TV and recording studios, and theaters.
- *Category 1, High Sensitivity*: This category includes buildings where vibration levels would interfere with operations within the building, such as buildings where vibration-sensitive research and manufacturing is conducted, hospitals with vibration-sensitive equipment, and universities conducting physical research operations.
- *Category 2, Residential*: This category includes all residential land uses and buildings where people normally sleep, such as hotels and hospitals.

⁷ City of Oakland, 2005. City of Oakland General Plan, Noise Element, March.



Source: BASELINE Environmental, 2019.

Legend

- | | | |
|------------------------|--------------------------------------|--------------|
| Downtown Plan Boundary | Levels in dBA Ldn
Greater than 75 | 55 to 60 |
| BART Station | 70 to 75 | Less than 55 |
| BART Line | 65 to 70 | |
| Railroad | 60 to 65 | |

Downtown Oakland Specific Plan EIR

Note: Noise contours are based on the impact of traffic within and adjacent to the Plan Area and should not be interpreted as reflective of existing conditions outside the Plan Area.

Figure V.K-1
Noise Contours



Downtown Oakland Specific Plan EIR

**Figure V.K-2
Noise Monitoring Stations**

TABLE V.K-3 STATISTICAL SUMMARY OF AMBIENT NOISE MEASUREMENTS

Location ID and Description	Measurement Duration	A-Weighted Noise Level, dBA			Primary Noise Sources
		L _{eq}	L _{max}	L _{min}	
ST-1, in Jack London District, at the intersection of 3rd Street and Madison Street, two blocks south of I-980 and two blocks north of rail tracks.	15-minute	55.6	65.3	50.3	Traffic on 3rd Street, Madison Street, and I-980; periodic noise from a construction site one block to the north.
ST-2, in Old Oakland District, at the intersection of 8th Street and Jefferson Street, two blocks east of I-980 and two blocks north of I-880.	15-minute	62.5	77.8	54.5	Traffic on 8th Street and Jefferson Street. Although this location is located two blocks away from I-980 and I-880, traffic from roadways is still the primary source of noise because highway noise is shielded by buildings. However, more trucks were observed at this location due to the close proximity to highways.
ST-3, adjacent to Uptown District, at the intersection of San Pablo and 18th Street, three blocks east of I-980.	15-minute	58.5	71.9	49.9	Traffic from San Pablo, airplane noise, people talking over the phone.
ST-4, KONO District, at the intersection of 25th Street and Northgate Avenue, one block east of I-980.	15-minute	62.4	72.0	56.4	Traffic from I-980, 25th Street, Northgate Avenue, and BART. More trucks were observed at this location due to the close proximity to I-980.
ST-5, Lakeside District, along 15th Street in between Jackson Street and Madison Street; no highway sources.	15-minute	47.9	51.9	44.6	Traffic from 15th Street, music from a car on Jackson Street, and audible construction noise from far away, airplane noise.
ST-6, West of San Pablo District, west of San Pablo Avenue in between Castro Street and Martin Luther King Jr. Way, one block east of I-980 and shielded by Greyhound Bus Station.	15-minute	61.3	67.3	55.9	Traffic from I-980 and San Pablo Avenue.

Source: Noise monitoring data collected by BASELINE. Field notes are included in Appendix E

- *Category 3, Institutional:* This category includes institutions and offices that have vibration-sensitive equipment and have the potential for activity interference such as schools, churches, doctors' offices.

In addition, extreme vibration could also cause minor cosmetic or substantial building damage. Historic buildings could be more susceptible to vibration depending on the condition of the buildings. Historic buildings within the Plan Area are shown on Figure III-23 in *Chapter III, Project Description*.

(2) Existing Vibration Sources

The existing vibration sources within the Plan Area include the Amtrak commuter trains, BART, and freight trains. Amtrak commuter trains could generate vibration levels of up to 85 VdB near their tracks, and BART trains typically generate vibration levels of 70 VdB or more near their tracks.⁸ Freight trains could create vibration levels that are 3 to 8 VdB higher than those created by rail cars and therefore could reach up to 93 VdB near the train tracks.⁹ As indicated in *Section V.H, Geology and Soils*, and shown in Figure V.H-1, there are aboveground and belowground BART tracks within the Plan Area; the railroad for Amtrak commuter trains and freight trains is all aboveground. Groundborne vibration and groundborne noise from belowground BART could be more noticeable at particular locations than aboveground BART and commuter rail because BART tunnels are located in closer proximity to building foundations. The levels of groundborne vibration and groundborne noise within existing structures are determined by many factors, such as proximity to the BART tunnel, foundation type, building construction, and efficiency of acoustical absorption.

2. Regulatory Setting

In California, noise is primarily regulated at the local level, through the implementation of general plan policies and local noise ordinances. The State provides guidance for the preparation of general plan noise elements. The purpose of a local general plan is to identify the general principles intended to guide land use and development, and the purpose of the ordinances is to specify the standards and requirements for implementing the principles of the general plan.

a. State Regulations

The California Noise Control Act and the applicable sections of the California Building Code are summarized below.

⁸ Federal Transit Administration (FTA), 2018. Transit Noise and Vibration Impact Assessment Manual, FTA Report No.0123, September.

⁹ Ibid.

(1) California Noise Control Act

Sections 46000 to 46080 of the California Health and Safety Code codify the California Noise Control Act of 1973. The Act established the Office of Noise Control under the California Department of Health Services. It requires that the Office of Noise Control adopt, in coordination with the Office of Planning and Research, guidelines for the preparation and content of noise elements for general plans. The most recent guidelines are contained in the California Office of Planning and Research's General Plan Guidelines.¹⁰ The document provides land use compatibility guidelines for cities and counties to use in general plans to reduce conflicts between land use and noise. The City has adopted a modified version of the State's land use compatibility guidelines, as discussed below.

(2) California Building Standards Code

The 2016 California Building Standards Code specifies interior noise levels for both residential and nonresidential uses during operation. Specifically, it specifies that interior noise levels attributable to exterior sources shall not exceed 45 dBA L_{dn} in any habitable room (e.g., residential homes for living, sleeping, eating, or cooking).¹¹ The noise metric used (either L_{dn} or CNEL) shall be consistent with the noise element of the local general plan.¹² The 2016 California Building Standards Code also specifies that buildings containing non-residential uses (e.g., retail spaces and offices) that are exposed to exterior noise levels at or above 65 dBA L_{eq} or CNEL shall maintain interior noise level below 50 dBA L_{eq} in occupied areas during any hour of operation.¹³ The buildings are required to comply with this interior sound level by either a prescriptive or performance method. A prescriptive method requires the use of building assemblies and components with appropriate Sound Transmission Class (STC) values and Outdoor-Indoor Sound Transmissions Class (OITC) values. A performance method requires an acoustical analysis documenting compliance with this interior sound level, to be prepared by personnel approved by the architect or engineer of record before the building is built.

b. City of Oakland

(1) City of Oakland General Plan

The Oakland General Plan contains guidelines for determining the compatibility of various land uses with different outdoor noise environments.¹⁴ The Noise Element recognizes that some land

¹⁰ California Office of Planning and Research (OPR), 2017. State of California General Plan Guidelines.

¹¹ Habitable space is a space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

¹² California Code of Regulations (CCR), Title 24, Part 2, Vol. 1, Section 1207.4.

¹³ California Code of Regulations (CCR), Title 24, Part 11, Section 5.507.

¹⁴ City of Oakland, 2005. City of Oakland General Plan, Noise Element, March.

uses are more sensitive to ambient noise levels 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. The City uses State noise guidelines for judging the compatibility between various land uses and their noise environments, which are summarized in Table V.K-4 for various common land uses.

The Noise Element also contains the following goals, policies, and action items that are applicable to the Specific Plan:

Goal 1: 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; and

Goal 2: To safeguard Oakland's economic welfare by mitigating noise incompatibilities among commercial, industrial and residential land uses.

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 (Figure 6 of the Noise Element [Table V.K-4 above]) 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 2.2:* 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.

TABLE V.K-4 OAKLAND GENERAL PLAN NOISE LAND USE COMPATIBILITY MATRIX

Land Use Category	Community Noise Exposure in Decibels (L _{dn} or CNEL, dB)						
	50	55	60	65	70	75	80
Residential							
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, and Professional							
Industrial, Manufacturing, Utilities, Agriculture							
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).	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 insulation, mitigation or abatement features are included in the design.						
CONDITIONALLY ACCEPTABLE Development should be undertaken only after an analysis of noise-reduction requirements is conducted, and if necessary noise-mitigating features are included in the design. Conventional construction will usually suffice as long as it incorporates air conditioning or forced-air-supply systems, though it will likely require that project occupants maintain their windows closed.	CLEARLY UNACCEPTABLE Development should not be undertaken.						

Source: City of Oakland, 2005. City of Oakland General Plan, Noise Element, Figure 6, March.

The Land Use and Transportation Element contains the following policies that are applicable to the Specific Plan:

Policy N3.9: Orienting Residential Development. Residential developments should be encouraged to face the street and to orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space, and avoiding undue noise exposure.

Policy N5.2: Buffering Residential Areas. Residential areas should be buffered and reinforced from conflicting uses through the establishment of performance-based regulations, the removal of non-conforming uses, and other tools.

(2) City of Oakland Noise Ordinance

Chapter 17.120.050 of the Oakland Municipal Code establishes performance standards to control dangerous or objectionable environmental effects of noise. The operational noise level standards for residential and commercial zones are presented in Table V.K-5. The construction and demolition noise level standards for residential, commercial/industrial land uses are presented in Table V.K-6. Noise from mechanical heating, ventilation, and air conditioning (HVAC) systems is prohibited from exceeding the nighttime noise levels presented in Table V.K-5, and the systems are required to be housed within an enclosure if located within 200 feet of a residential zone. Chapter 17.120.060 prohibits activities from generating vibration that is perceptible without instruments by the average person at or beyond the lot line of the lot containing such activities. Vibration generated by motor vehicles, trains, and temporary construction or demolition work is exempt from this standard.

Chapter 8.18.010 of the Municipal Code defines nuisance noises and establishes noise enforcement procedures and penalties for excessive and annoying noises. Noise that conflicts with the performance standards established in Chapter 17.120.050 is considered a nuisance noise. Chapter 8.18.020 prohibits noises that would disturb the peace and comfort of any person from between the hours of 9:00 p.m. and 7:00 a.m. Additionally, the following construction noise control measures are required:

1. All construction equipment powered by internal combustion engines shall be properly muffled and maintained.
2. Unnecessary idling of internal combustion engines is prohibited.
3. All stationary noise-generating construction equipment such as tree grinders and air compressors are to be located as far as is practical from existing residences.
4. Quiet construction equipment, particularly air compressors, are to be selected whenever possible.

TABLE V.K-5 CITY OF OAKLAND OPERATIONAL NOISE STANDARDS AT RECEIVING PROPERTY LINE, DBA

Receiving Land Use	Cumulative Number of Minutes in a 1-Hour Period	Maximum Allowable Noise Level (dBA) ^{a,b}	
		Daytime 7:00 a.m. to 10:00 p.m.	Nighttime 10:00 p.m. to 7:00 a.m.
Residential and Civic ^c	20	60	45
	10	65	50
	5	70	55
	1	75	60
	0 (L _{max} ^d)	80	65
Commercial		Anytime	
	20	65	
	10	70	
	5	75	
	1	80	
	0 (L _{max} ^d)	85	
Industrial	20	70	
	10	75	
	5	80	
	1	85	
	0 (L _{max} ^d)	90	

^a These standards are reduced by 5 dBA for simple tone noise, noise consisting primarily of speech or music, or recurring impact noise.

^b If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level.

^c Legal residences, schools and childcare facilities, health care or nursing home, public open space, or similarly sensitive land uses.

^d L_{max} = maximum instantaneous noise level.

Source: City of Oakland Municipal Code, Section 17.120.050, Noise.

- 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.

TABLE V.K-6 CITY OF OAKLAND CONSTRUCTION NOISE STANDARDS AT RECEIVING PROPERTY LINE, dBA

	Daily 7:00 a.m. to 7:00 p.m.	Weekends 9:00 a.m. to 8:00 p.m.
Short-Term Operation^a		
Residential	80	65
Commercial, Industrial	85	70
Long-Term Operation^b		
Residential	65	55
Commercial, Industrial	70	60

Notes: If the ambient noise level exceeds these standards, the standard shall be adjusted to equal the ambient noise level. Nighttime noise levels from construction and demolition between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and between 8:00 p.m. and 9:00 a.m. on weekends and federal holidays are prohibited from exceeding the applicable nighttime operational noise level standards (see Table V.K-5).

^a Short-term construction or demolition operation is less than 10 days.

^b Long-term construction or demolition operation is 10 days or more.

Source: City of Oakland Municipal Code, Section 17.120.050, Noise.

(3) Standard Conditions of Approval

The City’s SCAs that are relevant to noise and vibration are listed below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-NOI-1: Construction Days/Hours (#62)

Applicable To: All projects involving construction.

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-NOI-2: Construction Noise (#63)

Applicable To: All projects involving construction.

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-NOI-3: Extreme Construction Noise (#64)

Applicable to: All projects involving construction. The Construction Noise Management Plan may be required prior to project approval.

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 90dBA), 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

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.

When Required: During construction

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-NOI-4: Project-Specific Construction Noise Reduction Measures (#65)

Applicable To: All projects for which a noise study was prepared during the project review process that resulted in preliminary recommended noise reduction measures to address specific adjacent sensitive receptors/ or businesses that may be impacted by construction noise more than typical (e.g. pre-school activity, meditation center, skilled nursing facility, etc.)

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. The project applicant shall implement the approved Plan during construction.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-NOI-5: Construction Noise Complaints (#66)

Applicable To: All major development projects, specifically those involving:

- a. Construction of 50 or more residential dwelling units;
- b. Construction of 50,000 sq. ft. or more of nonresidential floor area; or

c. CEQA review (e.g., negative declaration, mitigated negative declaration, or EIR).]

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-NOI-6: Exposure to Community Noise (#67)

Applicable To: All projects for which a noise study was performed during the project review process and the project exposure to community noise is Conditionally Acceptable, Normally Unacceptable, or Clearly Unacceptable per the land use compatibility guidelines of the Noise Element of the Oakland General Plan.

Requirement: The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following:

- a. 45 dBA: Residential activities, civic activities, hotels
- b. 50 dBA: Administrative offices; group assembly activities
- c. 55 dBA: Commercial activities
- d. 65 dBA: Industrial activities

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-NOI-7: Operational Noise (#68)

Applicable To: All projects.

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.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-NOI-8: Exposure to Vibration (#69)

Applicable To: All projects involving new residential facilities or new dwelling units located adjacent to an active rail line.

Requirement: The project applicant shall submit a Vibration Reduction Plan prepared by a qualified acoustical consultant for City review and approval that contains vibration reduction measures to reduce groundborne vibration to acceptable levels per Federal Transit Administration (FTA) standards. The applicant shall implement the approved Plan during construction. Potential vibration reduction measures include, but are not limited to, the following:

- a. Isolation of foundation and footings using resilient elements such as rubber bearing pads or springs, such as a "spring isolation" system that consists of resilient spring supports that can support the podium or residential foundations. The specific system shall be selected so that it can properly support the structural loads, and provide adequate filtering of groundborne vibration to the residences above.
- b. Trenching, which involves excavating soil between the railway and the project so that the vibration path is interrupted, thereby reducing the vibration levels before they enter the project's structures. Since the reduction in vibration level is based on a ratio between trench depth and vibration wavelength, additional measurements shall be conducted to determine the vibration wavelengths affecting the project. Based on the resulting measurement findings, an adequate trench depth and, if required, suitable fill shall be identified (such as foamed styrene packing pellets [i.e., Styrofoam] or low-density polyethylene).

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-NOI-9: Vibration Impacts on Adjacent Historic Structures or Vibration-Sensitive Activities (#70)

Applicable To: All projects involving construction adjacent to an historical resource under CEQA or adjacent to vibration sensitive activities where vibration could substantially interfere with normal operations.

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 at [ENTER ADDRESS OF ADJACENT HISTORICAL RESOURCE OR VIBRATION SENSITIVE ACTIVITY]. 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.

When Required: Prior to construction

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

3. Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures

This section describes environmental impacts related to noise and vibration that could result from the implementation of the Specific Plan and its associated development. This section begins with the criteria of significance that establish the thresholds for determining whether an impact is

significant. The latter part of this section presents the impacts associated with the Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would have a significant impact related to noise and vibration if it would result in the following:

1. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding construction noise (Table V.K-6), except if an acoustical analysis is performed that identifies recommended measures to reduce potential impacts.¹⁵ 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 (Table V.K-5).
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.
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).¹⁶
5. Expose persons to interior L_{dn} or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories, and long-term care facilities (may be extended by local legislative action

¹⁵ 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.

¹⁶ Outside of a laboratory, a 3-dBA change is considered a just-perceivable difference. Therefore, 3 dBA is used to determine if the project-related noise increases are cumulatively considerable. Project-related noise should include both vehicle trips and project operations.

to include single-family dwellings) per California Noise Insulation Standards (Title 24 of the California Code of Regulations, Part 2).

6. Expose the project to community noise in conflict with the land use compatibility guidelines of the City of Oakland General Plan (Table V.K-4) after incorporation of all applicable SCAs.¹⁷
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).
8. During either project construction or project operation, expose persons to or generate ground-borne vibration that exceeds the criteria established by the FTA.¹⁸
9. Be located within an airport land use plan and expose people residing or working in the project area to excessive noise levels.
10. Be located within the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Analysis and Findings

The Specific Plan would facilitate development and growth within the Plan Area. The potential impacts that are identified are analyzed within the context of existing plans and policies, permitting requirements, local ordinances, and the City of Oakland's SCAs. Impacts that would be substantially reduced or eliminated by compliance with these policies or requirements are found to be less than significant.

¹⁷ The evaluation of land use compatibility should consider the following factors: type of noise source; sensitivity of the noise receptor; the noise reduction likely to be provided by structures; the degree to which the noise source may interfere with speech, sleep, or other activities characteristic of the land use; seasonal variations in noise source levels; existing outdoor ambient levels; general societal attitudes toward the noise source; prior history of the noise source; and tonal characteristics of the noise source. To the extent that any of these factors can be evaluated, the measured or computed noise exposure values may be adjusted to more accurately assess local sentiments toward acceptable noise exposure.

¹⁸ The FTA criteria were developed to apply to transit-related groundborne vibration. However, these criteria may also be applied to non-transit-related sources of vibration.

(1) Construction-Generated Noise (Criteria 1 and 2)

The primary noise impacts from construction of future projects under the Specific Plan would be related to the noise generated by the operation of heavy construction equipment. Construction noise levels would vary from day to day depending on the quantity, type, and condition of the equipment being used; the types and duration of activity being performed; the distance between the noise source and the receptor; and the presence or absence of barriers, if any, between the noise source and receptor. Demolition, excavation/grading, and foundation work are typically the noisiest phases of construction and would occur during the initial construction phases. The later phases of construction include activities that are typically quieter and that occur within the buildings under construction, thereby providing a barrier for noise between the construction activity and any nearby receptors. Pile driving may also be required for some projects, which can generate extreme levels of noise. Typical construction noise levels at 50 feet are shown in Table V.K-7.

TABLE V.K-7 TYPICAL RANGES OF CONSTRUCTION NOISE LEVELS AT 50 FEET, DBA L_{eq}

Construction Phases	Office Building, Hotel, Hospital, School, Public Works
Ground Clearing	84
Excavation	89
Foundations	78
Erection	87
Finishing	89

Note: Ground clearing includes demolition and removal of prior structures.
 Source: U.S. Environmental Protection Agency (EPA), 1973. Legal Compilation on Noise, Volume 1, Table 2-15.

As indicated in Table V.K-7, construction activities could generate exterior noise levels that exceed the construction noise standards (Table V.K-6) when noise-sensitive receptors are located 50 feet (or closer) from construction activities. Note that although the Setting section lists existing noise-sensitive receptors within the Plan Area, the presence and location of noise-sensitive receptors should be determined for each future development under the proposed Specific Plan because land uses could potentially change in the future.

Compliance with the City’s following SCAs would reduce impacts from construction noise to a less-than-significant level. All projects involving construction would be required to comply with SCA-NOI-1: Construction Day/Hours (#62) which limits the days and hours of construction to avoid generating noise when it would be most objectionable to neighboring receptors. These limitations, which specify that construction activities would be limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday (among other restrictions), would prevent the disturbance during sleep for a majority of residents near the Plan Area. This SCA also requires any extension of these work hours to be approved in advance by the City and requires property owners and occupants within 300 feet of the Plan Area to be notified of such an extension.

All projects involving construction would also be required to comply with SCA-NOI-2: Construction Noise (#63), which requires all construction projects to implement basic noise

reduction measures during construction, such as utilizing the best available noise control techniques and locating stationary noise sources as far from adjacent properties as possible. All projects involving construction would be required to comply with SCA-NOI-3: Extreme Construction Noise (#64), which requires that the project applicant prepare and implement a Construction Noise Management Plan that contains site-specific noise attenuation measures to reduce construction impacts associated with extreme noise generating activities.

All projects for which a noise study was prepared during the plan review process, and such study includes recommended noise reduction measures to address specific adjacent sensitive receptors/or businesses (such as pre-school activity, meditation center, or skilled nursing facility), would be required to comply with SCA-NOI-4: Project Specific Construction Noise Reduction Measures (#65), which requires the site-specific noise attenuation measures recommended by the Construction Noise Management Plan to be implemented during construction. All major development projects (including construction of 50 or more residential dwelling units, construction of 50,000 square feet or more of nonresidential floor area, and projects that require CEQA review) would be required to comply with SCA-NOI-5: Construction Noise Complaints (#66), which provides additional measures to respond to and track noise complaints during construction to allow sources of potentially disruptive construction noise to be quickly controlled or eliminated.

The Plan Area is an established, urbanized area where periodic and routine exposure to construction-related noise is an existing condition. Furthermore, the following Plan policy would encourage permeable surfaces on streets within the Plan Area, which would increase noise absorption as noise propagates from the sources to the receivers and reduce construction noise.

Policy CH-2.10. Prioritize the design and implementation of green streets that incorporate trees, landscaping and permeable surfaces to sequester carbon, reduce noise pollution, buffer pedestrians from cars, and manage stormwater, water and air quality. Incorporate the recommendations of the Oakland 50 Year Urban Forest Master Plan (expected completion 2020).

All streetscape improvements in the downtown area should explore potential for including green infrastructure and permeable surfaces to meet community health and placemaking goals. For example, the proposed "Green Loop" of the Plan passes through and connects many downtown districts and neighborhoods, creating a connected network of walking and biking paths. Street trees, green infrastructure, and permeable materials can be included as the streets that form this loop are reconfigured to include enhanced pedestrian and bicycle facilities. Unless prohibited by utilities, underground infrastructure, or other constraints, "green" design elements should be included.

With the implementation of SCAs described above and Policy CH-2.10, the impact of construction-generated noise would be reduced to a less-than-significant level. Therefore,

impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to construction-generated noise.

(2) Operational Noise (Criteria 3 and 4)

The primary operation period noise generation sources from future projects under the Specific Plan would occur as a result of the use of HVAC systems and increased vehicular traffic on area roads. In addition, the following Plan policy could encourage activities within the Plan Area that could generate elevated noise levels:

Policy E-2.9. Pursue creation of a nightlife district and strategy in downtown locations with concentrations of bars, restaurants, nightclub, and entertainment venues, such as Uptown and the Black Arts Movement & Business District (BAMBD); design the strategy to accommodate these uses and destinations at a variety of price points, and support attraction of diverse populations. Ensure the strategy provides support for Black-owned and Black-oriented businesses.

Noise generated from HVAC systems and activities associated with Policy E-2.9 would be subject to SCA-NOI-7: Operational Noise (#68), which requires all operational noise to comply with the performance standards of Chapter 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. Therefore, with the implementation of SCA-NOI-7, future projects under the proposed Specific Plan would not violate the City of Oakland operational noise standards (Table V.K-5), and the associated impact would be less than significant.

With regards to increased vehicular traffic on area roads, as indicated in Criterion 4, a project is considered to generate a significant increase in ambient traffic noise if it results in a 5 dBA permanent increase in noise levels in the Plan Area.

The assessment of AM and PM peak hour traffic volumes at roadway segments within and in the vicinity of the Plan Area indicates that traffic volumes increase would range from approximately 25 to 60 percent. The highest traffic volume increase of 60 percent would occur along Embarcadero between Market Street and Martin Luther King Jr. Way (AM peak period). The predicted existing and existing plus project traffic noise levels for this roadway segment are summarized in Table V.K-8 below. Traffic noise is expected to increase by about 2.3 dBA L_{eq} along Embarcadero between Market Street and Martin Luther King Jr. Way. As this segment would have the greatest predicted increase in traffic, traffic noise increases along other roadway segments affected by development that would occur under the Specific Plan would be less than 2.3 dBA L_{eq} .

This is below the 5-dBA significance threshold for project-generated traffic noise. The implementation of the Specific Plan would not result in a significant increase in traffic noise along local area roadways. Therefore, impacts associated with implementation of the Specific Plan and

TABLE V.K-8 EXISTING AND EXISTING PLUS PROJECT PEAK-HOUR TRAFFIC NOISE LEVELS FOR THE ROADWAY SEGMENT WITH HIGHEST INCREASE, DBA L_{eq} AT 50 FEET

Roadway Segment	Existing Traffic Noise Levels	Existing Plus Project Traffic Noise Levels	Estimated Increase in Noise
Embarcadero between Market Street and Martin Luther King Jr. Way, AM Period	47.3	49.6	2.3

Note: Traffic noise model outputs are included in Appendix E. FHWA TNM Version 2.5 model was used for these results.

Source: Appendix F of *Section V.B, Transportation and Traffic*.

reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to operational noise.

(3) Exposure of Persons to Significant Noise (Criteria 5-7)

Construction Phase

Construction workers could be exposed to excessive noise from the heavy equipment used during construction of future projects under the Specific Plan. However, noise exposure of construction workers is regulated by the California Division of Occupations Safety and Health (Cal/OSHA). Title 8, Subchapter 7, Group 15, Article 105 of the California Code of Regulations (Control of Noise Exposure) sets noise exposure limits for workers, and requires employers who have workers that may be exposed to noise levels above these limits to establish a hearing conservation program, make hearing protection available, and keep records of employee noise exposure measurements. The construction contractors for future projects under the proposed Specific Plan would be subject to these regulations, and compliance with these Cal/OSHA regulations would ensure that the potential of construction workers to be exposed to excessive noise is less than significant. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to exposure of persons to significant noise during construction.

Operational Phase

Ambient noise levels collected during the noise monitoring survey range from 47.9 dBA L_{eq} to 62.5 dBA L_{eq} (Table V.K-3). Noise modeling results indicate the ambient noise levels for the majority of the Plan Area are below 65 dBA L_{dn}, but could be above 70 dBA L_{dn} within one block of highways. Noise levels between 60 to 70 dBA L_{dn} are considered “conditionally acceptable” and noise levels between 70 to 75 dBA L_{dn} are considered “normally unacceptable” for residential land uses according to the City of Oakland General Plan (Table V.K-4). Therefore, based on noise levels collected during the noise monitoring survey and the noise modeling results, future

residential projects could be exposed to noise levels of “conditionally acceptable,” or “normally unacceptable” based on their specific location with the Plan Area. Land use compatibility standards are also included in Table V.K-4 for other types of land use categories.

Future projects under the Specific Plan, if located in a noise environment that is “conditionally acceptable,” “normally unacceptable,” or “clearly unacceptable” per the land use compatibility guidelines of the Noise Element of the Oakland General Plan, would be required to comply with SCA-NOI-6: Exposure to Community Noise (#67). SCA-NOI-6 requires noise reduction to be incorporated into building design based upon the recommendations of a qualified acoustical engineer. To the maximum extent practicable, the noise reduction measures would be required to reduce interior noise levels to 45 dBA L_{dn} for residential units, 50 dBA L_{eq} for non-residential spaces (e.g., retail spaces and offices), in accordance with the 2016 California Building Standards Code. Interior noise levels would also be reduced to 55 dBA L_{dn} for commercial activities and 65 dBA L_{dn} for industrial activities. STC rated windows, exterior doors (such as balcony doors), and exterior walls are commonly used to control interior noise from exterior sources. These noise control measures are required to be submitted to the City of Oakland for review and approval prior to the issuance of a building permit. Compliance with this SCA would reduce the potential for occupants of projects under the Specific Plan to be exposed to excessive or incompatible noise levels to a less-than-significant level. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to exposure of persons to significant noise during operations.

(4) Groundborne Vibration (Criterion 8)

Construction Phase

Construction activities can result in varying degrees of ground vibration, depending on the equipment, activity, and relative proximity to sensitive receptors. Typical vibration levels for construction equipment at a distance of 25 feet are shown in Table V.K-9 below.

Table V.K-10 and Table V.K-11 summarize the vibration criteria established by the FTA to prevent disturbance of occupants and to prevent damage to structures, respectively.

As indicated in Table V.K-9, construction activities could generate groundborne vibration that exceeds the criteria established by the FTA (Table V.K-10 and Table V.K-11) at vibration-sensitive receptors. Note that although the setting section lists examples of existing vibration-sensitive receptors within the Plan Area, the presence and locations of vibration-sensitive receptors should

TABLE V.K-9 VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV at 25 feet, in/sec	RMS at 25 feet, VdB
Pile Driver (Impact), Typical	0.644	104
Pile Driver (Sonic), Typical	0.17	93
Vibratory Roller	0.21	94
Large Bulldozer	0.089	87
Caisson Drilling	0.089	87
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

Source: Federal Transit Authority (FTA), 2018.

TABLE V.K-10 INDOOR GROUNDBORNE VIBRATION (GBV) AND GROUNDBORNE NOISE (GBN) IMPACT CRITERIA

Land Use Category	GBV Impact Levels (VdB)			GBN Impact Levels		
	Frequent Events ^a	Occasional Events ^b	Infrequent Events ^c	Frequent Events ^a	Occasional Events ^b	Infrequent Events ^c
Special Buildings	65-72	65-80	65-80	25-35	25-43	25-43
Category 1: Buildings where vibration would interfere with interior operations.	65	65	65	N/A ^d	N/A ^d	N/A ^d
Category 2: Residences and buildings where people normally sleep.	72	75	80	35	38	43
Category 3: Institutional land uses with primarily daytime use.	75	78	83	40	43	48

^a More than 70 vibration events of the same source per day.

^b Between 30 and 70 vibration events of the same source per day.

^c Less than 30 vibration events of the same source per day.

^d Vibration-sensitive equipment is generally not sensitive to ground-borne noise; however, the manufacturer's specifications should be reviewed for acoustic and vibration sensitivity.

Source: Federal Transit Authority (FTA), 2018.

TABLE V.K-11 CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Structural 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

Source: Federal Transit Authority (FTA), 2018.

be determined for each future development under the Specific Plan because land uses could potentially change in the future.

Compliance with the following SCAs would reduce impacts from construction vibration. All projects involving construction would be required to comply with SCA-NOI-2: Construction Noise (#63), which limits the use of impact tools, which would limit the use of equipment that could generate high vibration levels. SCA-NOI-2 also requires stationary construction equipment to be located as far as possible from adjacent properties. Because groundborne vibration attenuates rapidly with distance from the source of the vibration, SCA-NOI-2 would limit vibration impacts from any stationary construction equipment.

All projects involving construction would be required to comply with SCA-NOI-3: Extreme Construction Noise (#64). All projects for which a noise study was prepared during the project review process that resulted in preliminary recommended noise reduction measures to address specific adjacent sensitive receptors/or businesses (such as pre-school activity, meditation center, skilled nursing facility) would be required to comply with SCA-NOI-4: Project-Specific Construction Noise Reduction Measures (#65). SCA-NOI-3 and SCA-NOI-4, which require the development of Construction Noise Management Plan and implement site-specific mitigation measures to reduce extreme noise. Because high noise-generating construction activities often generate high vibration levels, compliance with SCA-NOI-3 and SCA-NOI-4 would reduce vibration impacts from potential high vibration-generating construction activities.

All major development projects (including construction of 50 or more residential dwelling units, construction of 50,000 square feet or more of nonresidential floor area, and projects that require CEQA review) would be required to comply with SCA-NOI-5: Construction Noise Complaints (#66) which requires the implementation of measures to respond to and track complaints, which would allow sources of potentially disruptive construction vibration to be quickly controlled or eliminated.

All projects involving construction adjacent to an historical resource under CEQA or adjacent to vibration-sensitive activities where vibration could substantially interfere with normal operations would be required to comply with SCA-NOI-9: Vibration Impacts on Adjacent Historic Structures or Vibration Sensitive Activities (#70). To determine whether there are adjacent historical resources or whether vibration would interfere with vibration-sensitive activities, a search radius for potential vibration-sensitive receptors should be determined. The search radius is determined by calculating a buffer distance that would be required to reduce vibration levels to below the threshold for potential vibration-sensitive receptors. According to Table V.K-9, under a typical condition the most vibration-generating piece of equipment is a typical impact pile driver, which can generate vibration levels of 104 VdB and 0.644 in/sec at 25 feet. The most stringent thresholds are 65 VdB for vibration-sensitive activities (Table V.K-10), and 0.12 in/sec for historical resources (Table V.K-11). Therefore, for vibration associated with the most potentially impactful piece of equipment (a typical impact pile driver), a buffer distance of 499 feet¹⁹ would be required to prevent interference of vibration-sensitive activities (below 65 VdB), and a buffer distance of 115 feet²⁰ would be required to protect historical resources (below 0.12 in/sec). Therefore, under a typical condition, construction vibration would not interfere with vibration-sensitive activities at a distance of 499 feet or beyond, or cause damage to historical resources at a distance of 115 feet or beyond. However, within the calculated buffer distances (499 feet for vibration-sensitive activities and 115 feet for historical resources), future development projects should determine whether construction would cause damage to historical resources or interfere with vibration-sensitive activities. If so, future development projects would be required to prepare a Vibration Analysis by an acoustical and/or structural engineer or other appropriate qualified professional for City review. The Vibration Analysis would establish threshold levels of vibration that could damage the structure and/or substantially interfere with activities at vibration-sensitive receptors and identify design means and methods of construction in order to not exceed the thresholds that would be established specifically for these projects. Note that this SCA would not be applicable if future projects are not within 115 feet of an historical resource under CEQA or not within 499 feet of vibration-sensitive activities if the most vibration-generating piece of equipment is a typical impact pile driver.

¹⁹ The buffer distance was calculated based on the following equation:

$$\text{RMS}_2 = \text{RMS}_1 - 30 \log_{10} (D_2/D_1)$$

Where:

RMS₁ is the reference vibration level at a specified distance, and RMS₂ is the calculated vibration level.

D₁ is the reference distance (in this case 25 feet), and D₂ is the distance from the equipment to the receiver.

²⁰ The buffer distance was calculated based on the following equation:

$$\text{PPV}_2 = \text{PPV}_1 \times (D_1/D_2)^{1.1}$$

Where:

PPV₁ is the reference vibration level at a specified distance, and PPV₂ is the calculated vibration level.

D₁ is the reference distance (in this case 25 feet), and D₂ is the distance from the equipment to the receiver.

Operational Phase

As discussed above, the existing vibration sources within the Plan Area include railroad and BART trains. If future projects under the Specific Plan are located adjacent to railroad or BART, occupants of those projects could be exposed to ground-borne vibration that exceeds the criteria established by the FTA (Table V.K-10 and Table V.K-11). Compliance with the following City SCA-NOI-8: Exposure to Vibration (#69), would reduce impacts of vibration exposure during operation to a less-than-significant level. SCA-NOI-8 requires that all projects involving new residential facilities or new dwelling units located adjacent to an active rail line would be required to have a Vibration Reduction Plan prepared by a qualified acoustical consultant for City review and approval. The Vibration Reduction Plan would contain vibration reduction measures to reduce ground-borne vibration to acceptable levels per FTA standards (Table V.K-10 and Table V.K-11). Reduction measures would include, but not limited to isolation of foundation and footings with rubber bearing pads or springs and trenching between railway and the development site so that the vibration path is interrupted.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to groundborne vibration during operations.

(5) Aircraft Noise (Criteria 9 and 10)

The Plan Area is not located within the vicinity of a private airstrip.²¹ Therefore, the Specific Plan would have no impact related to the exposure of people to excess noise levels from private airstrips.

Oakland International Airport is the closest airport to the Plan Area, and is approximately five miles to the southeast. The Plan Area is not located within a public airport land use plan or within two miles of any other public use airport.²² Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to the exposure of people to excess noise levels from public use airports.

²¹ Federal Aviation Administration (FAA), 2019. Airport Data and Contact Information. Effective: March 28, 2019. Database searched for both public-use and private-use facilities in Alameda County. Available at: http://www.faa.gov/airports/airport_safety/airportdata_5010/, accessed March 27, 2019.

²² Alameda County Community Development Agency (ACCD), 2010. Oakland International Airport, Airport Land Use Compatibility Plan, December.

c. Cumulative Noise Impacts

For noise and vibration, the geographic scope for assessing cumulative impacts is the Plan Area and adjacent vicinity. Noise and vibration dissipate with increased distance from the source and therefore, cumulative noise and vibration impacts would not be expected unless new sources of noise are located in close proximity to each other. The impacts from construction noise and vibration for future projects under the proposed Specific Plan would be reduced to less-than-significant levels with implementation of City's SCAs for construction noise and vibration. If multiple construction projects occur in the vicinity of the Plan Area, all projects would be subject to the same construction noise and vibration SCAs, thereby reducing potential cumulative construction noise and vibration impacts to a less-than-significant level.

During operation, as indicated in Criterion 4, a project is considered to contribute to a significant cumulative impact if (1) the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the Plan Area; and (2) 3 dBA of the cumulative increase is attributable to the Specific Plan.

Under a cumulative scenario, which considers traffic generated by past, present, and probable future projects, including the Specific Plan, the highest 18 traffic noise increases between the Cumulative Plus Project scenario and Existing scenario are presented in Table V.K-12. Table V.K-12 shows the increase in traffic noise range from 4.8 dBA L_{eq} to 12.3 dBA L_{eq} . As these are the roadway segments with the greatest predicted increase in traffic volume, traffic noise increases along other roadway segments would be less than 4.8 dBA L_{eq} , and therefore would be below the 5 dBA significance threshold for cumulative impacts. Although a significant cumulative noise increase is anticipated among the roadway segments listed in Table V.K-12 (except Martin Luther King Jr. Way between 7th Street and 8th Street, which is 4.8 dBA L_{eq}), the contribution of the Specific Plan to the cumulative noise increase (Cumulative No Project compared to Cumulative Plus Project) would range from 0.1 to 1.6 dBA L_{eq} , which is below the 3 dBA cumulative contribution significance threshold. Consequently, the contribution of the Specific Plan to significant cumulative traffic noise increase is less than cumulatively considerable. Therefore, impact related to cumulative noise increase would be less than significant.

To summarize, the Specific Plan would not result in a significant cumulative noise and vibration impact during construction with implementation of City's SCAs for construction noise and vibration. During operation, although a significant cumulative noise increase is anticipated among the roadway segments listed in Table V.K-12 (except Martin Luther King Jr. Way between 7th Street and 8th Street), the contribution of the Specific Plan to significant cumulative traffic noise increase is less than cumulatively considerable. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to cumulative noise increase.

TABLE V.K-12 EXISTING, CUMULATIVE, AND CUMULATIVE PLUS PROJECT PEAK-HOUR TRAFFIC NOISE LEVELS FOR THE 15 HIGHEST INCREASE ROADWAY SEGMENTS IN DBA L₅₀

Roadway Segment	(A) Existing	(B) Cumulative No Project	(C) Cumulative Plus Project	(C-A) Difference between Cumulative Plus Project and Existing	(C-B) Difference between Cumulative Plus Project and Cumulative No Project
Market Street between Embarcadero and 3rd Street, PM Period	54.2	66.4	66.5	12.3	0.1
Market Street between Embarcadero and 3rd Street, AM Period	56	65.7	65.9	9.9	0.2
Martin Luther King Jr. Way between Embarcadero and 3rd Street, AM Period	54.9	62.5	62.8	7.9	0.3
Martin Luther King Jr. Way between Embarcadero and 3rd Street, PM Period	57	64	64.3	7.3	0.3
Market Street between 3rd Street and 7th Street, PM Period	59.6	66.2	66.5	6.9	0.3
Martin Luther King Jr. Way between 5th Street and 6th Street, AM Period	54.9	61	61.5	6.6	0.5
Market Street between 3rd Street and 7th Street, AM Period	59.3	65.5	65.8	6.5	0.3
Castro Street between 5th Street and 6th Street, AM Period	51.8	57.5	58.1	6.3	0.6
6th Street between Brush Street and Castro Street, AM Period	47.4	53.1	53.7	6.3	0.6
Martin Luther King Jr. Way between 6th Street and 7th Street, AM Period	54.7	60.3	60.8	6.1	0.5
Martin Luther King Jr. Way between 3rd Street and 5th Street, AM Period	56.9	62.3	62.7	5.8	0.4
Martin Luther King Jr. Way between 6th Street and 7th Street, PM Period	57.4	62.2	62.6	5.2	0.4
Castro Street between 3rd Street and 5th Street, AM Period	52.6	57.4	57.7	5.1	0.3
Castro Street between 6th Street and 7th Street, AM Period	53.7	58.5	58.8	5.1	0.3

TABLE V.K-12 EXISTING, CUMULATIVE, AND CUMULATIVE PLUS PROJECT PEAK-HOUR TRAFFIC NOISE LEVELS FOR THE 15 HIGHEST INCREASE ROADWAY SEGMENTS IN DBA L_{eq}

Roadway Segment	(A) Existing	(B) Cumulative No Project	(C) Cumulative Plus Project	(C-A) Difference between Cumulative Plus Project and Existing	(C-B) Difference between Cumulative Plus Project and Cumulative No Project
Martin Luther King Jr. Way between 3rd Street and 5th Street, PM Period	58.5	63.3	63.6	5.1	0.3
Market Street between 7th Street and 12th Street, AM period	60.9	64.4	66.0	5.1	1.6
Brush Street between 3rd Street and 5th Street, AM Period	56.9	61.4	61.9	5.0	0.5
Martin Luther King Jr. Way between 7th Street and 8th Street, AM Period	56.1	60.4	60.9	4.8	0.5
City's Significance Threshold				5	3

Note: **Bold and shaded** text indicates exceedance of City's significance thresholds. Traffic noise model outputs are included in Appendix E. FHWA TNM Version 2.5 model was used for these results.
Source: Appendix F of the transportation section.

L. POPULATION AND HOUSING

This section describes the current population and housing in the Plan Area and its vicinity and analyzes how implementation of the Downtown Oakland Specific Plan and its associated development may affect these conditions. Specific Plan policies, existing City policies, and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified. No additional mitigation measures were determined necessary.

1. Setting

The following describes existing conditions and trends for housing and population within the Plan Area, greater downtown, and Oakland as a whole. Data for greater Downtown Oakland have been taken from Strategic Economics' Draft Affordable Housing and Anti-Displacement Background and Strategies Memorandum prepared to inform the Specific Plan.¹ The Strategic Economics Memorandum uses U.S. Census data for the greater Downtown Oakland area, which includes most of the Plan Area, all of Chinatown, and small portions of the West Oakland Specific Plan (north of I-980) and Broadway Valdez District Specific Plan (north of West Grand Avenue and east of Broadway) plan areas, as shown in Figure V.L-1. The term "greater Downtown Oakland" or "downtown" is used to reflect this expanded geography.

For CEQA purposes, this section also includes population and housing unit data specific to the Plan Area. Population and housing data for the Plan Area are best-guess estimates based on U.S. Census data; Plan Area data were estimated by modifying Census block data depending on whether the census blocks included parcels outside the Plan Area (e.g., Chinatown) or excluded parcels that are in the Plan Area (e.g., parcels east of Lake Merritt Channel).

For projected regional growth discussed in this section data from the downtown/Jack London Square (DJL) Priority Development Area (PDA) was used. At 1,335 gross acres, the geographic area of the DJL PDA is approximately 400 acres larger than the Plan Area.² For long-term growth, a fine-grained approach specific to the Plan Area was not needed and this broader geographic area is appropriate for discussing long-term regional growth.

Although not required by CEQA, information on racial disparities has been included for informational purposes.

¹ Strategic Economics, 2018. Draft Affordable Housing and Anti-Displacement Background and Strategies Memorandum, June 13.

² The DJL includes several areas that are outside of the Plan Area: (1) Howard Terminal, (2) an area in the LMSAP south of Lake Merritt, and (3) a small portion of the BVDSP area. Additionally, the DJL terminates at I-980 to the west, whereas the Plan Area continues one block farther west than I-980.



Legend

- Downtown Plan Boundary
- BART Station
- BART Line
- Railroad
- Parks
- Perimeter of Census Blocks

Downtown Oakland Specific Plan EIR

Figure V.L-1
Greater Downtown Census Blocks in the Plan Area

a. Population and Household Characteristics

There are approximately 12,520 households residing in greater Downtown Oakland with a population of approximately 23,130 residents.³ These households represent just over 5 percent of the Oakland's total population. However, the downtown has become a focus for new residential development and is growing much faster than the City as a whole. According to U.S. Census data, between 2000 and 2010, downtown population increased by 32 percent while the City's overall population declined by 2 percent. Eliminating portions of greater downtown that are outside the Specific Plan's boundary (i.e., Chinatown, areas to the west of I-980, areas north of 27th Street),⁴ an estimated 19,220 people live in the Plan Area and there are approximately 12,030 housing units as presented in Table V.L-1.

(1) Racial and Ethnic Diversity

Due to a steady influx of immigrants during the 20th century and relocation of war-industry workers during the 1940s, Oakland is one of the most ethnically diverse major cities in the country. The U.S. Census estimates that, as of the 2011 to 2015 period, greater Downtown Oakland's residential population was classified as:

- 39 percent Asian American and Pacific Islander
- 26 percent White
- 20 percent African American
- 9 percent Hispanic or Latino
- 4 percent "Other"
- Less than 1 percent American Indian or Native Alaskan

The population trends of Downtown Oakland reflect the citywide decline in African American residents. Since 2000, the African American population has declined by 7 percent in greater Downtown Oakland, and 26 percent in the City overall, with the difference made up by increases in all other racial and ethnic groups. As a result, the share of African American residents in downtown declined from 29 percent of the population to 20 percent over this period, with the actual population declining over this period. The share of Asian Americans and Pacific Islanders declined from 42 percent of downtown's population to 39 percent of the population over the same period, as this group's numerical growth did not keep pace with overall population growth. Supporting race and ethnicity data are presented in Table V.L-2.

³ Strategic Economics 2018. Draft Affordable Housing and Anti-Displacement Background and Strategies Memorandum, page 10, June 13

⁴ Portions of the following Census blocks were removed: Block Group 2, Census Tract 4013; Block Group 3, Census Tract 4013; Block Group 1, Census Tract 4026; Block Group 1, Census Tract 4027; Block Group 1, Census Tract 4030; Block Group 2, Census Tract 4030; Block Group 1, Census Tract 4033; Block Group 2, Census Tract 4033; Block Group 2, Census Tract 4034; Block Group 1, Census Tract 9820. The changes to these Census blocks were roughly estimated using spatial imagery and mathematical calculations of lot area coverage.

TABLE V.L-1 POPULATION AND HOUSEHOLDS IN DOWNTOWN OAKLAND AND THE CITY OF OAKLAND: 2005, 2010, 2011-2015 PERIOD, AND 2013-2017 PERIOD

	2000	2010	Net Change	2011-2015	Net Change	2013-2017	Net Change: 2000-2013/2017	Percent Change: 2000-Most Recent ^a
Population								
Plan Area ^b	13,798	17,806	4,008	18,140	334	19,219	5,421	39%
Greater Downtown	17,192	22,728	5,536	23,113	385	25,339	8,147	47%
City of Oakland	399,484	390,724	-8,760	408,073	17,349	417,442	17,958	4%
Households								
Greater Downtown	9,029	12,236	3,207	12,522	286	--	3,493	39%
City of Oakland	150,971	153,791	2,820	158,424	4,633	159,448	7,634	5%
Average Household Size								
Greater Downtown	1.8	1.69	-0.11	1.7	0.01	--	-0.1	-6%
City of Oakland	2.6	2.49	-0.11	2.5	0.01	--	-0.1	-4%

^a The percent change is between 2000 and the 2013-2017 period, when available. When 2013-2017 data was not available, the percent change is between 2000 and the 2011-2015 period.

^b Plan Area data were approximated by modifying data from U.S. Census blocks in and around the Plan Area. Plan Area data could not be found for the number of households or average household size.

Source: Strategic Economics, 2018; U.S. Decennial Census, 2000, 2010; American Community Survey, 2011-2015 and 2013-2017 5-Year Estimates; Urban Planning Partners, 2018.

(2) Economic Characteristics and Jobs

The median household income in Downtown Oakland is rising rapidly yet remains relatively low throughout much of downtown due to a high share of households with incomes of less than \$25,000 annually. Forty-one percent of downtown’s households earn less than \$25,000 annually, compared to 26 percent citywide. The lower incomes found in downtown are related to the area’s high share of small households (56 percent of householders live alone⁵), older residents (20 percent of downtown residents are 65 or older, compared to less than 12 percent citywide⁶),

⁵ Strategic Economics, 2018. Draft Affordable Housing and Anti-Displacement Background and Strategies Memorandum, June 13.

⁶ Ibid.

TABLE V.L-2 RACE AND ETHNICITY, DOWNTOWN AND OAKLAND, 2000 AND 2011-2015 PERIOD

	2000		2011-2015		Change	
	Population	Share	Population	Share	Population	%
Downtown Oakland						
White	2,849	17%	6,041	26%	3,192	112%
African American	4,910	29%	4,554	20%	-356	-7%
Asian American and Pacific Islanders	7,223	42%	9,095	39%	1,872	26%
American Indian or Native Alaskan	70	0%	212	1%	142	203%
Hispanic or Latino	1,522	9%	2,183	9%	661	43%
Other	618	4%	1,028	4%	410	66%
Total	17,192	100%	23,113	100%	5,921	34%
City of Oakland						
White	93,953	24%	109,805	27%	15,852	17%
African American	140,139	35%	103,580	25%	-36,559	-26%
Asian American and Pacific Islanders	62,259	16%	67,663	17%	5,404	9%
American Indian or Native Alaskan	1,471	0%	1,478	0%	7	0%
Hispanic or Latino	87,467	22%	106,643	26%	19,176	22%
Other	14,195	4%	18,904	5%	4,709	33%
Total	399,484	100%	408,073	100%	8,589	2%

Sources: U.S. Decennial Census, 2000 and American Community Survey 5-Year Estimates 2011-2015; Strategic Economics, 2015.

and concentration of income-restricted affordable housing (approximately 24 percent of the city's subsidized income-restricted affordable housing units are in the Plan Area⁷).

There are also racial disparities in wage and income levels across downtown residents. The Downtown Oakland Disparity Analysis⁸ reported the median income of Oakland's Black households was 43 percent of White households (\$85,489), and Asian and Latino households earned just over half the median income of White households, as of 2010-2014 US Census estimates.

⁷ Strategic Economics, 2018. Draft Affordable Housing and Anti-Displacement Background and Strategies Memorandum, June 13.

⁸ City of Oakland, 2018. Downtown Oakland Disparity Analysis, January 26.

As of 2019, there is approximately 34.5 million square feet of commercial and residential space built or under construction within the Plan Area. It is estimated that this commercial space accommodates approximately 58,986 jobs in the Plan Area. Existing and under construction industrial and institutional space accommodates an estimated approximately 1,020 industrial workers and 8,659 institutional workers, coming to a total of approximately 68,665 employees in the Plan Area. Supporting data is presented in Table V.L-3.

TABLE V.L-3 EXISTING DOWNTOWN BUILT SPACE BY LAND USE

	Square Footage	Employees
Residential	6,034,281	
Total Commercial (SF)	23,039,803	68,665
Office	15,016,592	47,553
Retail	8,023,211	11,433
Flex	N/A	N/A
Industrial (SF)	1,788,992	1,020
Institutional (SF)	3,646,073	8,659
Total	34,509,149	68,665

^a Existing Baseline refers to the amount of population, and employment within the Plan Area Boundary
^b Active Development refers to any major project in the Downtown District listed on the Major Project List in any phase from pre-application to under construction (excludes complete projects) as of April 2019.
^c Commercial Unspecified space has been classified as retail.
Sources: City of Oakland. City of Oakland Major Projects List. Copy of City of Oakland Housing Element Annual Progress Report Form FINAL, Laney College Facilities & Technology Master Plan Update, Shapefile. Last modified May 5, 2019.

b. Housing

In recent history, Downtown Oakland has struggled to consistently attract housing development, (with the exception of single room occupancies (SROs)) resulting in a public policy focus on encouraging growth and reinvestment by lowering cost and permitting barriers and even assisting development projects. For example, former Oakland mayor Jerry Brown’s “10k” initiative of 1999 to 2007 targeted goals of building new housing and attracting 10,000 additional residents to the downtown area. The former Oakland Redevelopment Agency also played an active role in the development of both market-rate and income-restricted affordable housing in downtown.

The housing market and development conditions have changed dramatically in Downtown Oakland since the “Great Recession” of the late-2000s through early-2010s. Downtown Oakland is now experiencing substantial new development, especially multi-story multi-family rental

buildings. According to City of Oakland permit data and major development project descriptions, approximately 4,600 housing units were either under construction or completed during the period from 2016 to 2018.⁹ This accounts for over a third of citywide housing development activity in that period, yet downtown overall only makes up 8 percent of total existing citywide housing units. Downtown is also estimated to have accounted for a third of Oakland's planned and approved (but not yet built) housing units as of late-2017.

(1) Housing Stock

There are approximately 15,032 housing units in greater downtown¹⁰ and an estimated 12,030 housing units in the Plan Area as of 2018.¹¹ An additional 1,519 units were also under construction within the Plan Area as of April 2019.¹²

The majority of housing units in Downtown Oakland are located in larger multi-family buildings. The U.S. Census estimates that 57 percent of housing units in Downtown Oakland are located in buildings with 50 or more units as of 2011-2015, up from 50 percent in 2000 and compared with 9 percent of units being located in such buildings citywide. Only 3 percent of downtown housing units are located in detached or attached single-family homes. Over 60 percent of downtown units were built prior to 1980. Supporting data is shown in Table V.L-4.

Similar to most other cities in the San Francisco Bay Area, Oakland's housing stock is less than the amount needed to house the growing population. This is especially true for households at or below 120 percent of the area median income (AMI). The City of Oakland's 2018 Housing Element Progress Report found that production of "above moderate income" housing units (those affordable to households earning 120 percent or more of AMI) met 85 percent of 2023 targets. However, production of more affordable housing units only met 7 percent of targets. The affordable housing shortage is improving at the citywide level: development project data compiled by the City of Oakland in June of 2018 showed that over 15 percent of housing units in citywide planned and proposed projects will consist of income-restricted affordable housing.¹³ However, 48 percent of households citywide earn less than the \$63,251 area median income and

⁹ Strategic Economics calculated approximately 3,000 units that were under construction or completed from 2016 to 2017 and Urban Planning Partners did additional calculations to account for units through 2018.

¹⁰ Strategic Economics, 2018. Draft Affordable Housing and Anti-Displacement Background and Strategies Memorandum, June 13. The greater downtown refers to the current amount of housing units within the Downtown Oakland and Lake Merritt Specific Plan boundaries.

¹¹ Estimate done by Urban Planning Partners using U.S. Census American Community Survey 2013-2017 5-Year Estimates, City of Oakland Parcel Data, the 2018 City of Oakland Housing Element Annual Progress Report, and the City of Oakland Major Projects List as of May 5, 2019.

¹² Estimated based on the City of Oakland Major Projects List as of May 5, 2019.

¹³ Strategic Economics, 2018. Draft Affordable Housing and Anti-Displacement Background and Strategies Memorandum, June 13.

TABLE V.L-4 HOUSEHOLD SIZE, DOWNTOWN AND OAKLAND, 2000 TO 2011-2015 PERIOD

	2000		2010		2011-2015		Change	
	#	Share	#	Share	#	Share	#	%
Downtown Oakland								
Householders Living Alone	5,306	59%	6,939	57%	7,057	56%	1,751	33%
2 persons per household	2,180	24%	3,570	29%	3,943	31%	1,763	81%
3 persons per household	727	8%	942	8%	887	7%	160	22%
4 persons per household	425	5%	446	4%	409	3%	-16	-4%
5 persons per household	219	2%	174	1%	110	1%	-109	-50%
6+ persons per household	172	2%	165	1%	116	1%	-56	-33%
Total Households	9,029	100%	12,236	100%	12,522	100%	3,493	39%
City of Oakland								
Householders Living Alone	48,952	32%	52,103	34%	53,860	34%	4,908	10%
2 persons per household	42,872	28%	76,793	50%	48,297	30%	5,425	13%
3 persons per household	22,504	15%	42,606	28%	24,677	16%	2,173	10%
4 persons per household	16,571	11%	32,022	21%	16,558	10%	-13	0%
5 persons per household	9,300	6%	16,560	11%	7,652	5%	-1,648	-18%
6+ persons per household	10,591	7%	8,864	6%	7,380	5%	-3,211	-30%
Total Households	150,790	100%	153,791	100%	158,424	100%	7,634	5%

Sources: U.S. Decennial Census, 2000, 2010; American Community Survey, 2011-2015 5-Year Estimates; Strategic Economics, 2017.

less than 3 percent of the 7,900 units planned and proposed for construction in downtown are anticipated to consist of income-restricted housing.

Historically, downtown has served as a concentrated center of subsidized, income-restricted housing. As of 2015, approximately 24 percent of Oakland's subsidized income-restricted affordable housing units were located in the Plan Area,¹⁴ despite Downtown Oakland only containing 8 percent of all citywide housing units (per 2015 U.S. Census estimates). Eight percent of the Plan Area income-restricted affordable units are set aside for extremely low-income households, 75 percent for very low-income households, 14 percent for low-income households, and 2 percent for moderate-income households.

¹⁴ Strategic Economics, 2018. Draft Affordable Housing and Anti-Displacement Background and Strategies Memorandum, June 13. Ibid.

Downtown Oakland also features a high number of single room occupancy hotels (SROs), “residential hotels” that provide a relatively accessible and sometimes lower-cost housing option. Market-rate SROs are often a less expensive form of housing and they provide a flexible and more accessible option for renters since they generally do not require a security deposit, references, proof of income, or a long-term lease. According to a 2015 City study, there were 1,311 total SRO housing units within the 18 SROs located in or near downtown.¹⁵ Five of the eighteen SROs were income-restricted affordable housing, while the other thirteen were not. City data as of 2015 shows that downtown’s SROs represent 85 percent of income-restricted SRO units citywide.¹⁶ Overall within the Plan Area, approximately 3 percent of residential units are attached or detached single family homes, 2 percent are duplexes, 9 percent are small buildings with 3 to 9 units, and 86 percent of residential units are in buildings with 10 or more units.¹⁷

(2) Housing Cost

Housing prices have increased throughout the region in recent years as the economy attracted new residents to the Bay Area and drove rapid population growth. The demand and price pressure have exerted a strong effect on Downtown Oakland, which is particularly attractive due to its proximity to transit and jobs.

Rents have risen dramatically in both the City of Oakland and the Plan Area over the last decade. The average monthly rent in multifamily buildings downtown is \$3.18 per square foot, compared to the citywide average of \$2.50 per square foot. Between 2000 and 2018, rents per square foot have increased approximately 51 percent in Downtown Oakland, compared to 54 percent for the city as a whole.

As rents and prices have outpaced incomes, renters and homeowners in Downtown Oakland are increasingly cost-burdened¹⁸ by housing expenses – and therefore at greater danger of displacement. According to 2015 U.S. Census estimates, 54 percent of Downtown Oakland renters pay over 30 percent of their income on housing, and 25 percent of households spend more than half their income on housing. This compares to 45 percent and 23 percent, respectively, in 2000. Over a third of all homeowners in Downtown Oakland are also paying over 30 percent of their annual income on homeownership, similar to 37 percent of all homeowners in the City overall.

¹⁵ City of Oakland Housing and Community Development Department, 2015. Downtown Oakland’s Residential Hotels: Cost, Characteristics, Challenges, September.

¹⁶ Data tracked by the Oakland Department of Housing and Community Development.

¹⁷ Estimate done by Urban Planning Partners using U.S. Census American Community Survey 2013-2017 5-Year Estimates.

¹⁸ A household is typically considered “cost-burdened” if housing and related expenses exceed 30 percent of that household’s income.

Oakland's households of color are more likely to experience housing cost burdens. In 2015, Oakland's White homeowner households had the lowest housing cost burden at 29 percent, and Black homeowner households had the highest housing burden at nearly 45 percent. An even larger disparity exists between White and Black renter households, for whom the burden is 40 percent and 63 percent, respectively.

c. Anticipated Growth

Anticipated regional and local growth is predicted through Plan Bay Area, a joint effort led by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC). As part of the Plan Bay Area planning process, forecasts are made for national, state, and regional employment and population growth.

According to Plan Bay Area, the Bay Area is expected to gain nearly 2.1 million residents between 2010 and 2040, reaching a total population of 9.3 million, a 30 percent increase over the 2010 population and the number of housing units is expected to increase by 24 percent (660,000) to 3.4 million.¹⁹ Oakland is expected to add over 230,000 new residents and 82,000 new households by 2040, accommodating almost half of the total population and household growth projected for Alameda County between 2010 and 2014.²⁰

The Plan Area, like much of Oakland, falls within a designated PDA, which is an infill location served by transit and recognized as an appropriate place to concentrate future growth. In designated PDAs, compact land development is promoted. The JDL PDA is one of seven PDAs in Oakland where 80 percent of new housing production is expected to take place. Table V.L-5 shows current and 2040 projected population and household growth citywide and in the downtown area.

¹⁹ Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), 2013. Plan Bay Area 2040, Chapter 2: The Bay Area in 2040, page 31. Available at https://www.planbayarea.org/sites/default/files/pdfs_referenced/2-the_bay_area_in_2040.pdf, accessed August 28, 2019.

²⁰ Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), 2018. Projection 2040. A Companion to Plan Bay Area 2040, November. Available at http://mtcmedia.s3.amazonaws.com/files/Projections_2040-ABAG-MTC-web.pdf, accessed August 28, 2019.

TABLE V.L-5 EXISTING AND FORECAST POPULATION AND HOUSEHOLDS

	Existing City of Oakland	2040 City of Oakland	Growth	Existing Greater Downtown	2040 DJL PDA	Growth
Population	417,442	650,630	233,190	25,339	62,360 ^a	37,020
Households	159,448	241,470	82,020	12,522 ^b	32,820	20,300

Note: Forecasts have been rounded to nearest ten.

^a 2040 ABAG Projections Calculated by Number of Households; used a conversion factor of 1.9 persons per household.

^b Number of household data were not available for 2017, so 2015 number is used.

Sources: American Community Survey, 2013-2017 5-Year Estimates; American Community Survey, 2011-2015 5-Year Estimates; ABAG and MTC Projections 2040, Personal correspondence with Aksel Olsen, Metropolitan Planning Commission, Plan Bay Area 2040 Data, TAZ Data, PDA Data, Alameda County, June 07, 2018.

2. Regulatory Setting

a. State

(1) Regional Housing Needs Allocation and SB375

The Regional Housing Needs Allocation (RHNA) process is mandated by the State Housing Law and is a precursor to the periodic process of updating local housing elements of the General Plan. The State determines what the total housing needs will be in the region for the planning period, and ABAG distributes that need among local jurisdictions in the Bay Area, initiating each jurisdictions’ housing element update. Based on its allocation, the City of Oakland was required to identify sites sufficient to accommodate 14,765 new housing units at the specified level of affordability. This includes 2,059 units that are affordable to extremely- and very-low-income households, 2,075 for low-income households, 2,815 for moderate-income households, and 7,816 for above moderate. The total remaining RHNA by income level includes 1,318 units for very low, 1,563 for low, and 2,749 for moderate. As discussed further in *Chapter IV, Policy*, according to the zoning in place at the time of the most recent Housing Element adoption, the DJL PDA opportunity sites have capacity for 10,403 new housing units.²¹

²¹ City of Oakland Planning and Building Department, 2015. Table C-6 of the 2015-2023 Opportunity Sites Dataset, January 21. Note that the 2040 ABAG projections acquired from Aksel Olsen (Association of Bay Area Governments, Plan Bay Area 2040, PDA projections) indicate slightly different numbers for capacity for housing units. PDA counts come from a simulation model and can look different with each run, with differences being more noticeable for small PDAs.

b. Local

Applicable plans and goals from the Oakland General Plan that pertain to population, housing, and related effects are identified in *Chapter IV, Policy*. Relevant policies from the Land Use and Transportation Element (LUTE), Housing Element, and Oakland Municipal Code are listed below.

(1) Land Use and Transportation Element (LUTE)

The Oakland General Plan Land Use and Transportation Element (LUTE) contains the following policies that are relevant to the Plan Area:

Policy N3.6: The city strongly encourages the moving of dwellings which might otherwise be demolished onto vacant lots where appropriate and economically feasible.

(2) Housing Element

The Oakland General Plan Housing Element contains the following policies that are relevant to the Plan Area:

Housing Policy 1: The city recognizes that housing is a valuable resource that should be carefully conserved and maintained and will take all necessary steps to prevent damage to the city's occupied or vacant residential property.

Housing Production Policy 8: The city will make every attempt to preserve the existing housing stock whenever possible and to limit the conversion of residential units to nonresidential units.

Housing Production Policy 12: The city, where economically feasible, will cause to be relocated, rather than demolish, residential property acquired for public or private purposes and urges Federal and State agencies to use a similar approach.

(3) Ellis Act Ordinance

Development by the private sector that requires demolition of rental housing is subject to the Ellis Act (Government Code Sections 7060-7060.7) and the City of Oakland's Ellis Act Ordinance (Oakland Municipal Code Sections 8.22.400-8.22.480). Under that Ordinance, any owner can withdraw property from the rental market by filing a series of documents called Withdrawal Notices with the City's Rent Adjustment Program. The Withdrawal Notices must include notices of termination given to existing tenants, and withdrawal of the units is allowed only 120 days after noticing. If tenants are disabled or 62 years of age or older, one-year notice is required.

Under the Ordinance, lower-income households are entitled to relocation assistance of two months' rent in effect at the time of the notice of termination to mitigate the adverse impacts of

displacement. The Ordinance also gives the tenants the right to re-rent the withdrawn units should the units be re-offered for rent within 10 years.

(4) Standard Conditions of Approval

The City's SCAs that are relevant to population and housing are listed below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-POP-1: Jobs/Housing Impact Fee (#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).

When Required: Prior to issuance of building permit; subsequent milestones pursuant to ordinance

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

SCA-POP-2: Affordable Housing Impact Fee (#72)

Requirement: The project applicant shall comply with the requirements of the City of Oakland Affordable Housing Impact Fee Ordinance (chapter 15.72 of the Oakland Municipal Code).

When Required: Prior to issuance of building permit; subsequent milestones pursuant to ordinance

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

SCA-POP-3: Residential Tenants (#73)

Requirement: The property owner shall comply with all applicable laws and requirements concerning residential tenants, including but not limited to, the City's Rent Adjustment Ordinance (OMC chap. 8.22, Article I), Just Cause Eviction Ordinance (OMC chap. 8.22, Articles II & III), Tenant Protection Ordinance (OMC chap. 8.22, Article V) and Code Compliance Relocation Ordinance (OMC chap. 15.60). Existing and former tenants temporarily or permanently evicted, displaced or relocated due to the project or City action related to the project may be entitled to protections and benefits, including, but not limited to, relocation payments and the right to return to previous units. The property owner may be required to submit evidence of compliance with applicable tenant protection laws upon request of the City. For more information, please contact the Oakland Housing Assistance Center: 250 Frank H. Ogawa Plaza, 6th Floor, Oakland, California, 94612; (510) 238-6182.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section analyzes impacts related to population, housing, and employment that could result from implementation of the Specific Plan. The section begins with the criteria of significance, which establish the thresholds for determining whether an impact is significant. The latter part of

this section presents the impacts associated with the project and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Downtown Oakland Specific Plan would result in a significant impact on the City's population and housing 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 business) or indirectly (for example, through extension of roads and 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.
3. Displace substantial number of people, necessitating the construction of replacement housing elsewhere, in excess of that contained in the City's Housing Element.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statues and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Analysis and Findings

The population and housing statistics analyzed in this chapter were sourced from U.S. Decennial Census data, American Community Survey 5-year estimates, regional transportation analysis zones (TAZs), and 2013, 2017, and 2018 Association of Bay Area Governments (ABAG) projections. Changes to population and housing that would result from adoption and implementation of the Specific Plan were quantified and evaluated for potential physical environmental impacts that could result from displacement of housing and people. These changes were also evaluated in the context of potentially inducing population and employment growth in the Plan Area and its surrounding areas.

A ratio of 1.9 persons per household is used to estimate population. This ratio differs from the citywide ratio of 2.59 persons per household in 2018. The 1.9 persons per household is used because the housing units anticipated by development under the Plan would be smaller on

average than existing single-family homes citywide (the expected average unit size for the Plan Area is 750 square feet). Other nearby plans identified similar resident ratios: the Lake Merritt Station Area Plan anticipated an average of 2.0 persons per housing unit and the Coliseum Area Specific Plan anticipated an average of 1.84 persons per housing unit. In addition, projects used in the MTC's Plan Bay Area 2040 for the JDL PDA estimate that there will be a ratio of 1.87 persons per household.

(1) Induce Unplanned Population Growth (Criterion 1)

As shown in Table V.L-6, development anticipated with implementation of the Specific Plan development program would add up to 29,100 residential units, accommodating growth of up to approximately 52,600 residents.²² Growth due to the adoption of and development under the Specific Plan would contribute to population growth expected in Oakland in the future. The amount of population growth anticipated from adoption of and development under the Specific Plan would account for about 20 percent of total population growth projected for Oakland between 2010 and 2040, as shown in Table V.L-6. The additional expected residents due to development under the Specific Plan would constitute approximately 8 percent of the projected total population of Oakland in 2040.

The Specific Plan would result in a greater growth of jobs and population than anticipated in the DJL PDA. Growth due to adoption of and development under the Specific Plan would account for 143 percent of projected population growth in the PDA (from 2010-2040)²³ and 158 percent of projected job growth²⁴.

The DJL PDA is approximately 400 acres larger than the Plan Area²⁵ and includes Howard Terminal. The proposed project at Howard Terminal would be responsible for infrastructure improvements related to induced growth due to that project. Additionally, although growth associated with the Specific Plan exceeds what was projected for the DJL PDA, the growth will help the City further achieve goals and policies set forth in the General Plan, as explained below.

Population growth in the Plan Area was anticipated in the City of Oakland's General Plan and is supported and encouraged by the Land Use and Transportation Element (LUTE) policies, the Housing Element policies, and City zoning regulations. The 1998 LUTE identifies downtown as a

²² Based on a population per housing unit ratio of 1.9, and a 95% occupancy rate.

²³ 52,600 (population growth under the Specific Plan 2040) /36,640 (Growth in DJL PDA 2010-2040)

²⁴ 60,730 (employment growth under the Specific Plan 2040) /38,430 (Growth in DJL PDA 2010-2040)

²⁵ The DJL includes several areas that are outside of the Plan Area: (1) Howard Terminal, (2) an area in the LMSAP south of Lake Merritt, and (3) a small portion of the BVDSP area. Additionally, the DJL terminates at I-980 to the west, whereas the Plan Area continues one block farther west than I-980.

TABLE V.L-6 POPULATION AND EMPLOYMENT ESTIMATED GROWTH UNDER THE SPECIFIC PLAN COMPARED TO ESTIMATED PROJECTIONS

	Population	Households	Employment
Growth under the Specific Plan, 2040 ^a	52,600	27,685 ^b	60,730
Growth in DJL PDA 2010-2040	36,640 ^c	19,280	38,430
Projected Growth in Oakland, 2010 - 2040	258,520	87,680	93,670
Specific Plan Growth as Percent of City Growth	20%	32%	65%
Projected Total for City of Oakland, 2040	650,630	241,470	272,760
Specific Plan Total as Percent of City Total	8%	11%	22%

Note: Projections have been rounded to nearest ten.

^a See Table V.L-5, Downtown Future Development by Land Use.

^b Calculated by population; used a conversion factor of 1.9 persons per household.

^c 2040 ABAG Projections calculated by number of households; used a conversion factor of 1.9 persons per household.

Source: Association of Bay Area Governments (ABAG), 2018. Plan Bay Area Projections 2040, A Companion to Plan Bay Area 2040, November 2018, Population and Housing. Available at: http://mtcmedia.s3.amazonaws.com/files/Projections_2040-ABAG-MTC-web.pdf, accessed June 3, 2019 except for Growth in JLS 2010-2040 which source is Personal correspondence with Aksel Olsen, Metropolitan Planning Commission, Plan Bay Area 2040 Data, TAZ Data, PDA Data, Alameda County, June 7, 2018.

“Showcase District” and encourages higher density development in the Plan Area, along major corridors, at the waterfront, and near BART stations. Additionally, increasing the activity of downtown through the development of new housing is a key component of the vision for downtown in the General Plan.²⁶ Supportive policies include but are not limited to Industry and Commerce Policy I/C1.6 Promoting downtown as a Regional “Hub” and downtown Policies D4.2 Fostering a Positive Business Climate, D4.3 Attracting Employment to the downtown, D5.1 Encouraging Twenty-Four Hour Activity, D8.3 Attracting Private Office Development, and D10.1 Encouraging Housing. In the 2015-2023 Housing Element, the City identified “housing opportunity sites” capable of accommodating projected housing needs, with the Greater downtown area accommodating over half the number of allowable housing units.²⁷ Well-served by regional transportation/transit facilities and close to employment hubs, the Plan Area is a preferred location for development of higher-density infill housing. While the project would result in a higher growth in the number of jobs and housing than anticipated in the DJL PDA, the adoption of, and development under, the Specific Plan would not result in “substantial”

²⁶ City of Oakland, 1998. Envision Oakland: City of Oakland General Plan, Land Use and Transportation Element. Available at: <http://www2.oaklandnet.com/government/o/PBN/OurServices/GeneralPlan/DOWD009015>, accessed February 25, 2019.

²⁷ City of Oakland, 2014. 2015-2023 Oakland Housing Element. Available at: <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak050615.pdf>, accessed February 25, 2019.

population growth in comparison to the amount of population growth and the total population anticipated for Oakland in the future and it would not result in population growth in a manner not anticipated in Oakland's General Plan.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to inducing population growth.

(2) Displacement of Housing and People (Criterion 2 and Criterion 3)

All of the opportunity sites were carefully selected to be either vacant, parking, or underutilized commercial uses; therefore, the direct loss of housing units would be unlikely to occur. Build-out of the Specific Plan development program would result in approximately 29,100 additional housing units by 2040, averaging approximately 1,460 units per year between 2020 and 2040. On the chance that there was a displaced housing unit or units, it would not be expected to necessitate the construction of replacement housing elsewhere outside the Plan Area given the higher-density housing that would replace the displaced units and create a substantial net increase.

While it would be unlikely for displacement of housing and people to occur due to direct impacts of the Specific Plan; the jobs/housing relationship is an important issue to address. While regional and local governments may use jobs-housing balance as a planning tool to weigh particular policy outcomes, it does not necessarily imply a physical change to the environment or related to any recognized criteria under CEQA.

Potential indirect displacement could occur if development under the Plan would result in physical or socioeconomic changes (e.g., gentrification²⁸) in the site vicinity that result in displacement of existing residents. While rising land prices and housing costs can cause indirect displacement, this would only be considered a physical impact under CEQA criteria if it would necessitate the construction of replacement housing elsewhere. In this case, the Plan would bring value to the City and increase economic activity and land costs in the vicinity, and thus could represent what researchers Grier and Grier would call "reinvestment displacement".²⁹

²⁸ Gentrification is a particular kind of neighborhood revitalization, distinct because of its possible displacement effects. Most studies agree that gentrification at a minimum leads to exclusionary displacement and may push out some renters as well. Gentrification scholarship often is focused on interracial or -ethnic dynamics of neighborhood change, particularly where white in-movers arrive in neighborhoods with predominantly residents of color. Available at: http://iurd.berkeley.edu/uploads/Displacement_Lit_Review_Final.pdf, accessed June 24, 2019 and https://www.urbandisplacement.org/sites/default/files/images/zuk_et_all_2017.pdf, accessed June 24, 2019.

²⁹ Zuk, Miriam, Ariel H. Bierbaum, Karen Chapple, Karolina Gorska, Anastasia Loukaitou-Sideris, Paul Ong, Trevor Thomas (University of California, Berkeley and University of California, Los Angeles), March 3, 2015. Gentrification,

Reinvestment displacement refers to when investments in neighborhoods result in increased rent to a point where it's profitable to sell or raise the rent and tenants are forced to leave.

Development investment under the Plan would happen at a time when other investments and housing costs in Oakland and the rest of the region have already been increasing. This makes it difficult to identify adoption of and development under the Plan as the cause of displacement versus other changes and investments within downtown and the rest of the region. Within Alameda County alone, rents rose in almost every neighborhood between 2000 and 2015.

Many tracks in the flatlands of Oakland and Berkeley saw increases of over 30 percent in median rent paid, while West Berkeley, Downtown Oakland, and the neighborhoods around the Coliseum and Mills College in East Oakland saw increases of over 50 percent. Many of the neighborhoods that experienced the largest increase in rental housing costs also saw significant losses of low-income households of color.³⁰ Across the Bay Area overall, a 30 percent census tract-level increase³¹ in median rent (inflation-adjusted) was associated with a 28 percent decrease in low-income households of color.³² However, because displacement is a regional phenomenon resulting partially from job growth and insufficient housing construction throughout the Bay Area, it would be speculative to identify a singular cause or contribution for increased land or housing costs that is directly attributable to the adoption of and development under the Plan as it relates to indirect displacement.

The Specific Plan includes several policies to address the threat of displacement. These policies include the following:

Policy H-1.7: Ensure that a mix of market-rate and income-restricted housing is constructed in downtown. Target creation of between 4,365 and 7,275 (aspirational target) affordable housing units including units designated to accommodate larger families out of a total housing production target of 29,100 new units. The target breakdown of new affordable units by income range, based on the City's 2015-2023 RHNA, should be: 15% extremely low-income, 15% very low-income, 30% low-income and 40% moderate income

Policy H-1.2: Leverage the city's inventory of publicly-owned land in a manner that supports housing affordability for Oakland residents.

Displacement and the Role of Public Investment: A Literature Review. Available at: http://iurd.berkeley.edu/uploads/Displacement_Lit_Review_Final.pdf, accessed June 24, 2019.

³⁰ UC Berkeley's Urban Displacement Project and the California Housing Partnership, 2019. Rising Housing Costs and Re-Segregation in Alameda County. Available at: https://www.urbandisplacement.org/sites/default/files/images/alameda_final.pdf, accessed June 24, 2019.

³¹ This report uses census tracts as proxies for neighborhoods. Tracts in Alameda County typically contain between 3,000 and 5,550 people

³² UC Berkeley's Urban Displacement Project and the California Housing Partnership, 2019. Rising Housing Costs and Re-Segregation in Alameda County. Available at: https://www.urbandisplacement.org/sites/default/files/images/alameda_final.pdf, accessed June 24, 2019.

Policy H-1.4: Study increasing the city's affordable housing impact fees potentially dedicate a portion of the new revenues generated to affordable housing production in downtown.

Policy H-1.9: Encourage the development of more commercial hotels downtown to relieve pressure to convert permanent housing units and SRO hotels to short-term tourist rentals.

Policy H-2.1: Continue to purchase and rehabilitate downtown's residential or single-room occupancy hotels (SROs) as income-restricted affordable housing, as funding and purchase opportunities arise.

Policy H-2.2: Continue to partner with and fund nonprofit housing organizations to acquire and rehabilitate SROs in downtown; consider adapting the city's notice of funding availability (NOFA) scoring criteria for funding applications to prioritize downtown sites for some funds.

Policy H-2.7: Pursue additional funding for expanded renter services and counseling.

Policy H-2.8: Maintain effective enforcement of rent adjustment and just cause eviction laws.

Policy H-2.9: Target creation of supportive services in existing and new affordable housing and at SRO's rehabilitated as income-restricted housing in downtown.

Policy H-2.10: Expand the definition of displacement in the City's standard regulatory agreements with affordable housing developers to prioritize units for Oaklanders who have been displaced from Oakland for broader economic reasons; and explore legally compliant ways of targeting homeownership and rental assistance to former Oakland residents harmed by discriminatory housing policies such as redlining and predatory lending. Allow such individuals or groups to apply for local assistance programs. This policy is underscored by the establishment of the Department of Race and Equity (see OMC 2.29.170).

Policy H-2.11: Implement a centralized online waiting list for affordable housing to include information on applicant's demographics, income and family history of residence in Oakland as an efficient mechanism to implement policy 2.10.

Policy H-2.12: Continue applying State and local first-time homebuyer programs to housing in downtown to enhance stable ownership opportunities, and consider modifying programs to include allowing former Oakland residents to apply for Oakland programs; explore new funding sources for these programs as opportunities arise.

Policy H-2.13: Per citywide efforts to secure homeowners in distress, implement programs to proactively identify homeowners at risk of foreclosure and direct these residents to available assistance and resources.

These policies would provide services for renters at risk of displacement, encourage the development of new affordable housing, and alleviate pressure on existing affordable housing in

Downtown Oakland, such as the Claridge Hotel (200 units) which is located within the Plan Area and was identified as at-risk in the 2015 – 2023 Housing Element.³³

In addition to the Specific Plan's policies, existing regulations would also mitigate the loss of any housing units due to implementation of the Specific Plan. As described earlier under Regulatory Setting, compliance with Housing Element policies Substandard Housing Policy 1 and Housing Production Policies 8 and 12, LUTE Policy N3.6, and the Ellis Act Ordinance would avoid any potential adverse effects related to the displacement of housing and people as a result of the future development in the Plan Area. In addition, SCA-POP-1: Jobs/Housing Impact Fee (#71), and SCA-POP-2: Affordable Housing Impact Fee (#72), would also help to minimize any potential adverse effects related to the displacement of housing and people.

The levels of housing development anticipated in Oakland and in the Plan Area build-out are consistent with the City's Housing Element and General Plan. Construction needed for replacement housing if existing housing units are redeveloped would not exceed replacement housing anticipated in the City's Housing Element, General Plan, and related zoning policies. The removal of housing units due to the Specific Plan development program would not be considered substantial in the context of total citywide housing units and the expected extensive net increase in housing units in the Plan Area and throughout the city into 2040.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to direct or indirect displacement of housing and people.

c. Other Considerations/Supplemental Information

(1) Jobs/Housing Relationship

While regional and local governments may use jobs-housing balance as a planning tool to weigh particular policy outcomes, it does not necessarily imply a physical change to the environment or relate to any recognized criteria under CEQA. Due to comments raised during the scoping period for this Draft EIR about homelessness, low-income households, and vulnerable groups, the job-housing balance (expressed as a ratio of jobs per household) is discussed here for informational purposes.

The balance between jobs and housing is generally assessed on citywide and regional scales, rather than on a project-by-project basis. Available data indicates that in 2017, the City of Oakland had approximately 1.06 jobs per employed resident, indicating that there are

³³ City of Oakland, 2014. 2015-2023 Oakland Housing Element, page 207. Available at: <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oako50615.pdf>, accessed February 25, 2019.

approximately the same number of jobs in Oakland as there are members of the workforce residing in the city.³⁴ As a comparison, San Francisco has a ratio of 1.75 jobs per household.³⁵ Because some households have more than one member of the workforce (employed residents) and some households have fewer, the ratio of jobs to employed residents is also of interest.

It is also important to note that Oakland residents do not always work in Oakland and jobs in Oakland are not always filled by local residents. The reality of who lives in Oakland and who works in Oakland, and the extent to which these are the same individuals involves a complex set of interactions and decision factors that determine where people choose to live and work, including but not limited to how much they can spend for housing, housing availability, and the “fit” between available jobs and the training and experience of local residents. The balance of jobs and employed residents evolves over time and reflects these socioeconomic factors as well as the role and location of particular areas within the larger regional context. Since one of the outcomes of people living at some distance from their jobs is increased traffic, the regional transportation model used in *Section V.B, Transportation*, of this Draft EIR uses projections with inherent assumptions regarding the amount and location of jobs and housing as well as the types of jobs and housing and the travel that occurs between them. The assumptions in the Alameda CTC Travel Demand Model (released May 2018) are based on Metropolitan Transportation Commission (MTC) Plan Bay Area and ABAG’s Projections 2017.

When considering the initial comparison of jobs and housing, the Specific Plan would result in 60,730 new jobs and 29,100 new housing units. This would create a relationship of approximately two jobs per household for the Plan Area, and would not materially alter the City’s existing ratio of jobs per households or its ratio of existing jobs per employed residents.³⁶ The *Plan Bay Area* estimates that there will be 32,821 households, and 111,370 jobs in 2040 for a ratio of 3.4 jobs per household in 2040. Within the city overall, *Plan Bay Area* estimates there will be 241,500 households with 272,800 jobs in 2040, for a ratio of approximately 1.13 jobs per household.³⁷ It is

³⁴ California Employment Development Department (EDD), Labor Market Information (LMI) by California Geographic Areas, Labor Force and Unemployment Rate for Cities and Census Designated Places, Annual Average 2017, December 28, 2017. Available at: <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>, accessed June 24, 2019 and U.S. Census Bureau, C24050: Industry by Occupation for the Civilian Employed Population 16 Years and Over. Universe: Civilian employed population 16 years and over more information. 2013-2017 American Community Survey 5-Year Estimates, 2017. Available at: factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?_afpt=table, accessed June 24, 2019.

³⁵ U.S. Census Bureau, Quick Facts San Francisco County, California, Households 2013-2017 and total employment 2016.

³⁶ Between 2017-2040 Plan Bay Area 2040 anticipates a higher rate of housing growth related to employment growth; that of 59,254 new jobs and 78,737 new households, for a relationship of 0.75 jobs per household. Note: employment growth is based on U.S. Census, 2017 and *Plan Bay Area 2040* growth (with 213,546 jobs in 2017, 272,800 in 2040), and housing growth is based upon Plan Bay Area 2040 growth (with 162,763 households in 2018, and 241,500 household in 2040).

³⁷ Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC), 2017. Plan Bay Area 2040, July 26.

appropriate to have a higher jobs/housing ratio in a downtown well-served by transit than in the rest of the city, or in a bedroom community.

Non-residential development, as part of the Plan, would be subject to the requirements of the City of Oakland Jobs/Housing Impact Fee Ordinance (Chapter 15.68 of the Oakland Municipal Code, as required under SCA-POP-1: Jobs/Housing Impact Fee (#71)). This fee would apply to the gross square feet of new office uses to mitigate the impact of employment growth on housing supply and affordability.

d. Cumulative Population and Housing Impacts

As shown above in Table V.L-6, the amount of population growth anticipated from adoption of and development under the Specific Plan would account for approximately 8 percent of the total population anticipated in Oakland in 2040 (excluding existing baseline and active development). While the project would result in a higher growth in the number of jobs and housing than anticipated in the DJL PDA, the adoption and development under the Specific Plan would not result in “substantial” population growth in comparison to the amount of population growth and the total population anticipated for Oakland, and would be less than significant.

(1) Job-Induced Population Growth

Employment growth in the Plan Area has been anticipated in Oakland’s General Plan and is supported and encouraged by General Plan Land Use policies and by the City’s Economic Development Strategy and related policies and activities. A key component of the General Plan’s vision for the Downtown Showcase District is support for growth and continued expansion of job opportunities.

Commercial development under the Specific Plan would add over 20 million square feet of commercial space, including 16.8 million square feet of office space. The Specific Plan would support employment growth of approximately 60,730 jobs in the Plan Area, which is a 47 percent increase from the baseline 68,665 jobs currently in the Plan Area.³⁸ This increase in employment would contribute to employment growth expected in Oakland in the future. The amount of employment growth anticipated from the Plan’s development program would account for about 65 percent of total employment growth projected for Oakland between 2010 and 2040 and approximately 22 percent of the total employment anticipated for Oakland in 2040 (see Table V.L-6), and 158 percent of the projected job growth within the DJL PDA. While the project would result in a higher growth in the number of jobs than anticipated in the DJL PDA, adoption and

³⁸ City of Oakland Parcel Data, City of Oakland Major Projects List as of April 2019. Copy of City of Oakland Housing Element Annual Progress Report Form, FINAL. Laney College Facilities & Technology Master Plan Update. Shapefile; employment multipliers provided by Dover, Kohl and Partners and found in Draft Specific Plan, August 2019.

development under the Specific Plan is a less-than-significant impact because it would not result in “substantial” employment growth in comparison to the employment growth and total employment anticipated for Oakland as a whole in the future.

Employment growth resulting from adoption and development under the Specific Plan would support the growth of households and population to provide the additional workers. The housing development anticipated under the development program also would temporarily generate additional workers. Cumulatively, the substantial growth of housing and population anticipated to occur throughout the City could accommodate the number of additional workers resulting from adoption of and development under the Specific Plan as well as the number of additional workers associated with other cumulative job growth.

(2) Infrastructure-Induced Growth

Adoption and development under the Specific Plan would facilitate urban infill development and the intensification of activity in an area already well-served by existing transportation/transit systems and other infrastructure and utilities. Development under the Specific Plan would not require construction or extension of new roads, utilities, and other infrastructure that might stimulate population growth in previously undeveloped areas.

Adoption and development under the Specific Plan could require on-site infrastructure improvements to accommodate new development to higher densities and for new uses. The infrastructure improvements would be specific to the development sites and would not induce substantial additional population growth in other areas, and therefore are a less than significant impact.

4. Summary

Due to: (a) the role of the Specific Plan in facilitating development that fulfills key components of the General Plan’s vision for the Downtown Showcase District, (b) the relatively moderate magnitude of Specific Plan-induced population and employment growth within the cumulative, citywide context, and (c) the Plan Area’s location in the core of an already-developed urban center, the adoption of and development under the Specific Plan would have a less-than significant-impact in inducing substantial population growth in a manner not contemplated by the General Plan, either directly by facilitating development of housing or businesses, or indirectly through infrastructure improvements.

M. PUBLIC SERVICES, FACILITIES, AND RECREATION

This section describes the current public services, facilities, and recreation conditions within and near the Plan Area and analyzes how implementation of the Specific Plan and its associated development may affect these conditions. Specific Plan, existing City policies, and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified. No additional mitigation measures were determined necessary.

1. Setting

This section describes existing public services, facilities, capacities, and expansion possibilities in the vicinity of the Plan Area.

a. Fire Protection

(1) Oakland Fire Department Operations

The Oakland Fire Department (OFD) provides fire protection services and emergency medical services within the Plan Area and throughout the City of Oakland, including emergency medical response, firefighting, special operations, and risk mitigations. The OFD operates with 25 Fire Stations, 6 Divisions, and over 500 fire service professionals. The Department receives 60,000 annual emergency calls.¹ OFD is considered an all-risk fire department that has specialized training and equipment to mitigate any emergency. OFD specialty fire stations (i.e., hazardous materials, technical and heavy rescue, and water rescue) are cross-staffed with an engine and/or truck company. Because of this cross-staffing, if a standard non-specialty incident is dispatched, it shuts down the specialty resource/asset until that unit is back in service. Or, in the event of a large-scale incident, OFD puts a call out for specialty members across the City to staff the needed specialty apparatus.

Two fire stations are located within the Plan Area: Fire Station 1 and Fire Station 15. Oakland Fire Station 1 is located at 1603 Martin Luther King Jr. Way in the northern portion of the Plan Area. In-service equipment housed at Station 1 includes an Engine, a Truck, a Heavy Rescue Unit, and a Battalion Chief 2. Oakland Fire Station 15 is located at 455 27th Street in the central eastern portion of the Plan Area. In-service equipment housed at Station 15 includes an Engine and a Truck.² Fire Station 12, located at 822 Alice Street, is in Chinatown just outside the Plan Area Boundaries.

¹ Oakland Fire Department, 2019. Fire. Available at: <https://www.oaklandca.gov/departments/fire>, accessed January 9, 2019.

² Oakland Fire Department, 2019. Fire. Available at: <https://www.oaklandca.gov/departments/fire#page-services>, accessed February 26.

Fire Station 2 (47 Clay Street), located in the Jack London District, is currently not in operation. Station 2 was closed as a dispatch facility in 2003 due to budget cuts along with OFD's fireboat (the *Sea-Wolf*). Station 2 is currently used for storage and training. It is planned to be re-opened later this year for use as a temporary fire station during planned remodels and fire station rebuilds that will be taking place in the City over the next 5 to 7 years.³ Station 2 is then planned to be demolished and a new station built as part of the Waterfront Ballpark District at Howard Terminal project, dependent on whether the Howard Terminal project is approved (expected approval late 2020).

(2) Oakland Fire Department Response Times

In the 2017-2018 fiscal year, OFD responded to 70,132 total emergency and non-emergency calls in the city.⁴ Because fast response is critical in preventing widespread damage from fires and other emergencies, OFD aims to provide emergency service within 7 minutes of notification 90 percent of the time. Generally, service can be provided in that time-frame to areas located within 1.5 miles of a fire station.⁵ OFD response times in 2018 within the Plan Area boundary and Chinatown are shown in Figure V.M-1 (as well as the locations of Fire Stations 1, 2, 12 and 15). In 2018, OFD average response times to 7,335 incidents in the Downtown/Lake Merritt area, depicted in Figure V.M-1, resulted in a 7-minute response time 93 percent of the time, with a 6-minute, 29-second average response time 90 percent of the time, meeting the OFD's response time goal.⁶

With daily freight and passenger rail passing through the City on the Union Pacific Railroad (UPRR) tracks located along the southern portion of the Plan Area, OFD units are frequently met with delayed response times to waterfront incidents. The longest freight trains can cause an approximate 30-minute delay to the other side of the railroad tracks.⁷ OFD average response times to 135 incidents in the Jack London Square waterfront area south of the UPRR tracks (shown in Figure V.M-2) resulted in a 7-minute response time 67 percent of the time, with an average 9-minute, 2-second response time 90 percent of the time⁸, which does not meet the OFD's response time goal.

³ Melinda Drayton, Deputy Chief. Oakland Fire Department, 2019. Personal communication with ESA regarding the Waterfront Ballpark District at Howard Terminal Project, February 4.

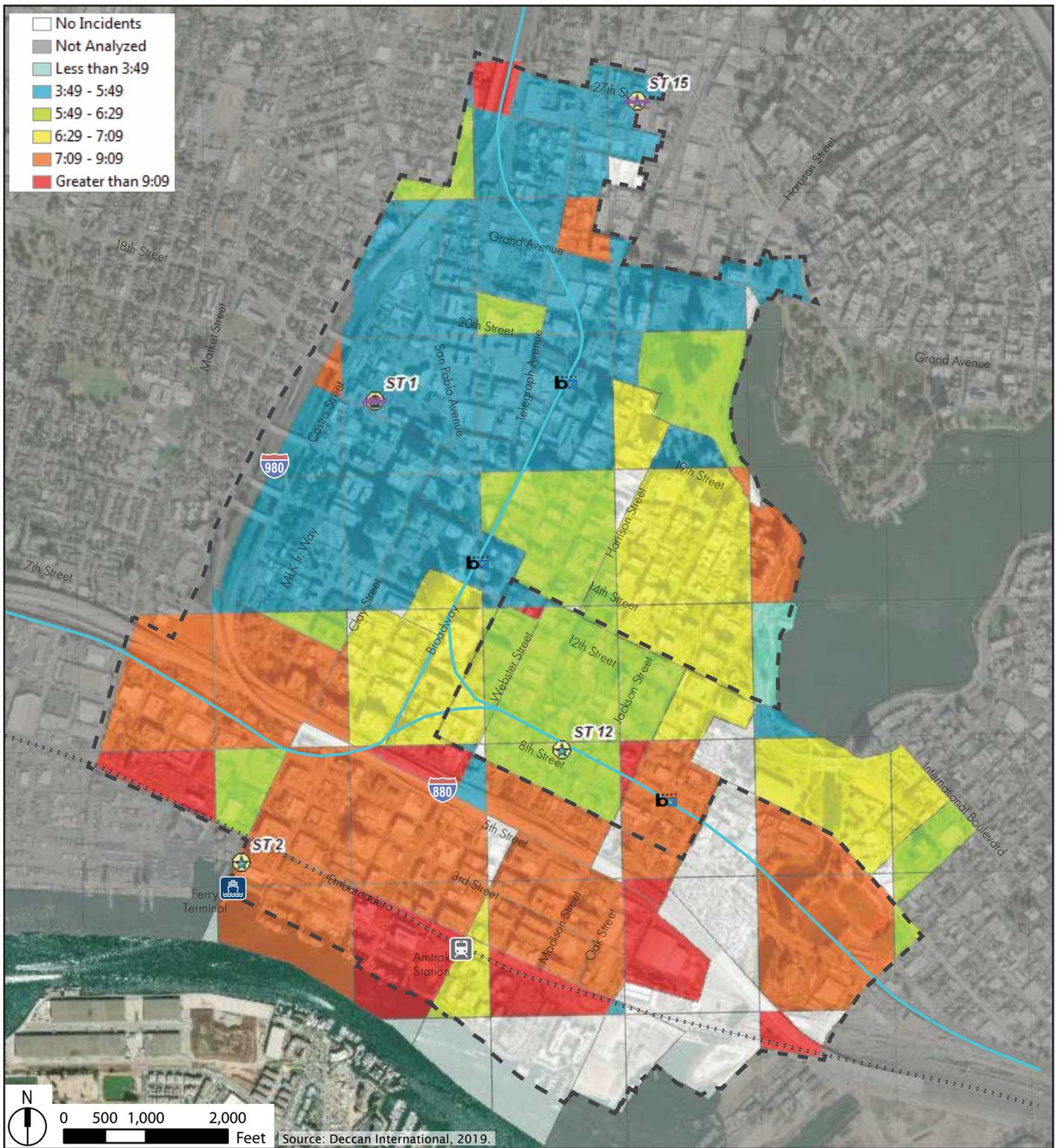
⁴ Ibid.

⁵ City of Oakland, 2012. City of Oakland, Safety Element. Adopted March 20.

⁶ Deccan International, 2019. Baseline Performance for Oakland Fire Department: January 2018-December 2018, April 23, 2019.

⁷ Melinda Drayton, Deputy Chief. Oakland Fire Department, 2019. Personal communication with ESA regarding the Waterfront Ballpark District at Howard Terminal Project, February 4.

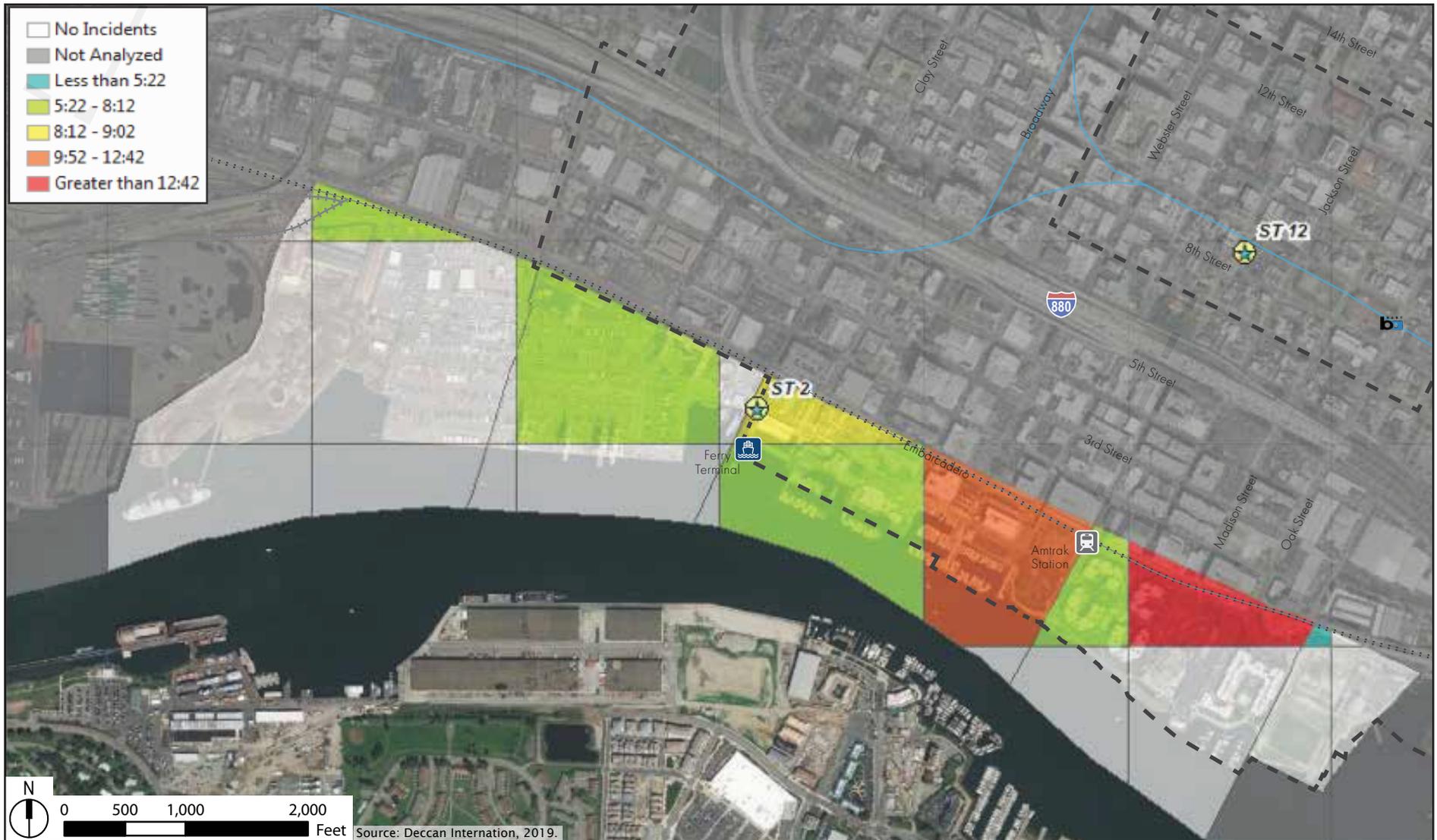
⁸ Deccan International, 2019. Baseline Performance for Oakland Fire Department: January 2018-December 2018, April 23, 2019.



- Legend**
- Dashed line: Downtown Plan Boundary
 - BART logo: BART Station
 - Blue line: BART Line
 - Black line with cross-ticks: Railroad

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Figure V.M-1
OFD 2018 Response Times - Downtown and Lake Merritt Area



Legend

- Dashed line: Downtown Plan Boundary
- BART logo: BART Station
- Blue line: BART Line
- Black line with cross-ticks: Railroad

Downtown Oakland Specific Plan EIR

Figure V.M-2
OFD 2018 Response Times - Waterfront Area South of Railroad Tracks

(3) Planned OFD Facility Improvements

OFD is planning a series of fire station remodels and construction projects using Measure KK Bond funds. Four fire stations will be remodeled including Station 10 (172 Santa Clara Avenue), Station 12 (mentioned above), Station 15 (455 27th Street), and Station 16 (3600 13th Avenue). These four remodels will require firefighters to relocate to another fire station while the work is being completed. In addition, to the four remodel projects, OFD has identified two stations that will be demolished and re-constructed at yet-to-be-finalized new locations in their respective fire districts. The two stations that will be shut down and re-constructed elsewhere are Station 4 (1235 International Boulevard) and Station 29 (1016 66th Avenue). As discussed above, Station 2 will be re-opening in 2019 to be utilized as a temporary fire station during the remodels and construction projects.⁹

b. Police Service

Police protection services are provided to the Plan Area by the Oakland Police Department (OPD), which is headquartered in Downtown Oakland at 455 7th Street. As of February 2019, the Oakland Police Department employed 747 sworn officers and 316 full-time professional civilian staff, with both categories of staffing currently below what has been budgeted.¹⁰ OPD had one sworn member per 537 Oakland residents in 2018 and seven violent crimes per sworn officer in 2017.¹¹

For the purposes of police protection, the city is divided into five geographic areas (“Police Areas”) with 57 patrol beats (1X through 35Y). The Plan Area is located within and spans across Patrol Area 1 (Downtown, West Oakland) and Patrol Area 2 (North Oakland, Uptown) and encompasses Beat 1X, Beat 3X, Beat 3Y, Beat 4X, and the southern portion of Beat 8X.¹²

Within Patrol Area 1 there are 81 officers assigned and 85 officers are assigned in Patrol Area 2, with 11 individuals currently loaned out to other assignments.¹³ Patrol Area 1, traditionally known as Downtown/West Oakland, is bordered by the City of Emeryville and Area 2 on the north, Lake Merritt and Area 3 to the east, the Oakland Estuary on the south, and San Francisco Bay on the

⁹ Melinda Drayton, Deputy Chief. Oakland Fire Department, 2019. Personal communication with ESA regarding the Waterfront Ballpark District at Howard Terminal Project, February 4.

¹⁰ Timothy Birch, Police Services Manager. Oakland Police Department, 2019. Personal communication with Urban Planning Partners, February 8.

¹¹ Ibid.

¹² Oakland Police Department (OPD), 2019. Oakland Police Areas. Available at: <https://www.oaklandca.gov/topics/oakland-police-areas#page-resources>, accessed February 26, 2019.

¹³ Timothy Birch, Police Services Manager. Oakland Police Department, 2019. Personal communication with Urban Planning Partners, February 8.

west. Area 1 contains multiple business districts, including Jack London Square, Downtown Oakland, City Hall (Frank H. Ogawa Plaza), Chinatown, the Port of Oakland, and West Oakland.¹⁴ Patrol Area 2, traditionally known as North Oakland/Uptown, is bordered by the City of Emeryville and the City of Berkeley to the west; Contra Costa County to the north; and Area 1, Area 3, and the City of Piedmont to the southeast. Area 2 consists of a combination of residential neighborhoods and commercial districts.

Additionally, a Neighborhood Crime Prevention Council, part of Oakland's community policing program, is organized for each police beat area. For each Neighborhood Crime Prevention Council, a Neighborhood Services Coordinator is assigned to help residents work together and in partnership with the police and other City departments to identify and solve problems, set priorities, and develop strategies to improve public safety and crime.

Calls placed to the Oakland Police Department are prioritized based on the nature of the call. 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. In 2018, the OPD median response time for Patrol Area 1, Priority 1 calls was 6 minutes 39 seconds and Priority 2 calls were 49 minutes and 48 seconds. In Patrol Area 2, the median response time for Priority 1 calls was 8 minutes 11 seconds while Priority 2 response times averaged to be 1 hour and 6 minutes.¹⁵ The median response time for Priority 3 calls ranges widely due to the nature of responding to non-emergency calls and lack of available staffing.

In 2018, the OPD median response time for citywide, Priority 1 calls was 7 minutes 39 seconds and Priority 2 calls were 70 minutes and 10 seconds.¹⁶ OPD currently operates two primary facilities: The Police Administration Building at 455 7th Street (274,200 square feet, completed in 1963) and the Eastmont Substation at 2651 73rd Avenue (64,000 square feet, opened 2001). The Police Administration Building houses the majority of OPD's human resources and serves 60 percent of the City – including downtown. OPD is currently working with the Department of Public Works to design a new Police Administration Building.¹⁷

¹⁴ Oakland Police Department (OPD), 2019. Oakland Police Areas. Available at: <https://www.oaklandca.gov/topics/oakland-police-areas#page-resources>, accessed January 2, 2019.

¹⁵ Eugenia Oliver, Communications Manager. Oakland Police Department, 2019. Personal communication with Urban Planning Partners, February 8.

¹⁶ Oakland Police Department (OPD), 2019. OPD Responses to ESA Request for Information regarding the Waterfront Ballpark District at Howard Terminal Project, March 7.

¹⁷ Timothy Birch, Police Services Manager. Oakland Police Department, 2019. Personal communication with Urban Planning Partners, February 11.

(1) OPD Crime Statistics

The most frequent crime reported from 2014 to 2018 was burglary (mostly auto related). The number of total crimes citywide decreased by approximately 10 percent between 2014 and 2018. However, there was a notable increase in burglary in 2017 that increased the overall crime total to its highest level during the 5-year period. In 2018, citywide burglary was reduced by 22 percent from 2017, which contributed to reducing total citywide crimes to their lowest levels during the 5-year period.

From 2014 to 2018, Police Area 1 experienced an increase in burglary, motor vehicle theft, larceny, and arson, which are characterized as non-violent crimes by the OPD. During this 5-year period, Police Area 1's contribution to the citywide crime total increased from approximately 19 percent in 2014 to 24 percent in 2018, due to the increase in these non-violent crimes. While in 2018, burglary in Police Area 1 was reduced to approximately 12 percent from 2017, this reduction was less than the 22 percent reduction in burglary experienced citywide.¹⁸

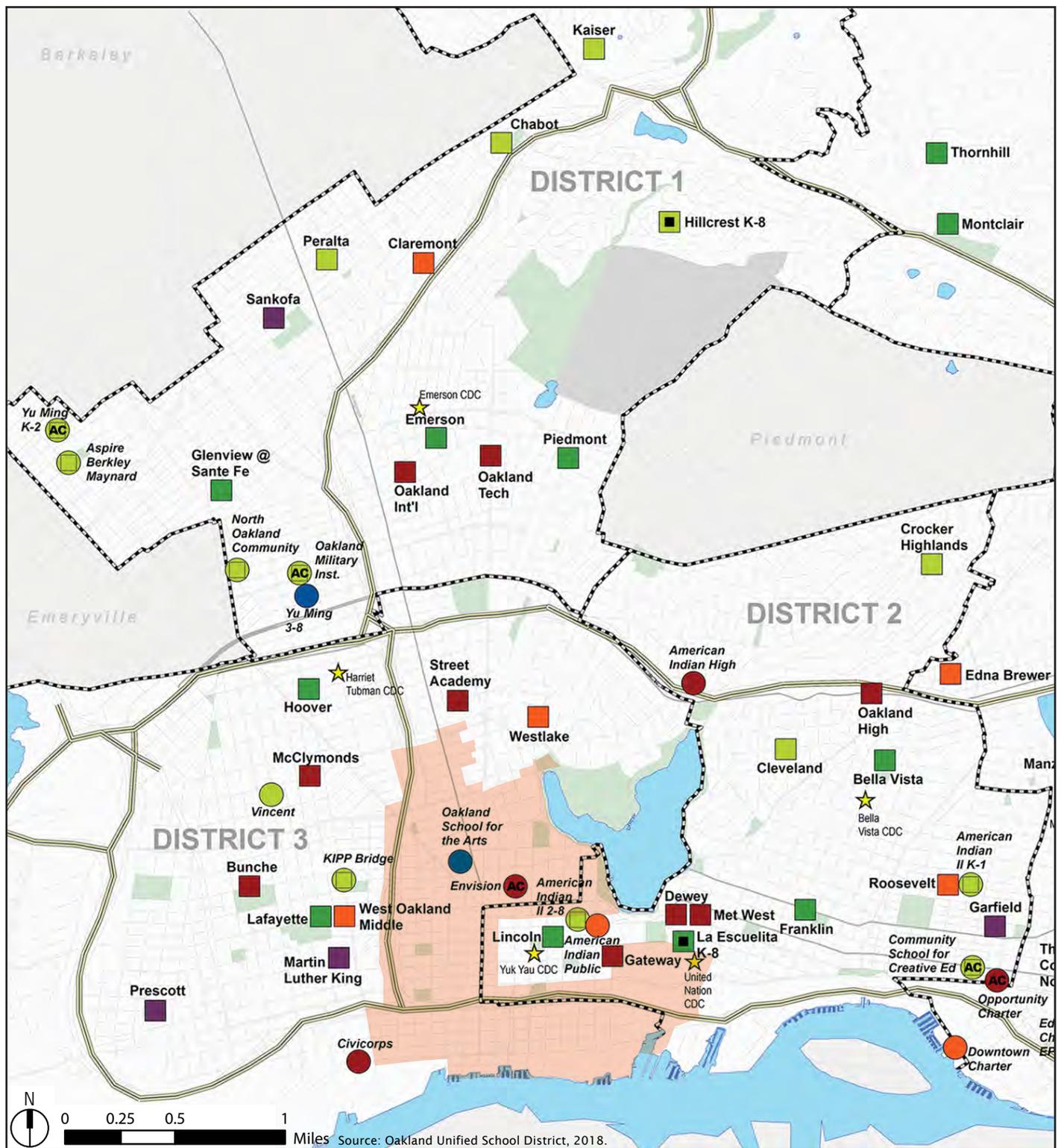
c. Schools

The Plan Area 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.¹⁹ There are also 34 OUSD-authorized charter schools. Total enrollment in OUSD schools and authorized charter schools for the 2018 to 2019 school year was 50,077 students (36,286 OUSD students and 13,791 charter school students). While many of the charter schools within Oakland are OUSD authorized, charter schools authorized by Alameda County, Alameda Unified, and California Board of Education are also located within the city.

The OUSD Board of Education boundaries are separated into seven districts. The Plan Area's southeastern portion is located within District 2, while the rest of the Plan Area is located within District 3. OUSD owned-schools and authorized-charter schools (*indicated with italic type*) within and/or near the Plan Area are shown in Figure V.M-3.

¹⁸ Oakland Police Department (OPD), 2019. Oakland Police Department Crime Analysis, End of the Year Crime Report, Citywide and Area 1, 01 Jan-31 Dec, 2018. Available at: <https://app.box.com/s/icb4flrew3pdwtlh9apirnae2x79vsgc>, accessed June 28, 2019.

¹⁹ Oakland Unified School District (OUSD), 2018. Fast Facts. Department of Research, Assessment & Data. Available at: <https://drive.google.com/drive/folders/oB6QEqRqzjxxzOGllWIBUS2d2ZXc>, accessed February 26, 2019.



Legend

- | | | | |
|-------------------------------------------|------------------------------------|------|--------------------------|
| Downtown Plan Boundary | District-Run Schools
★ PreK CDC | K-5 | Charter Schools
● K-5 |
| OUSD Board of Education District Boundary | PK-5 | K-8 | 6-12 |
| | TK-8 | 6-8 | 9-12 |
| | TK-5 | 9-12 | AC Alameda County* |
- *all other charters are OUSD authorized

Downtown Oakland Specific Plan EIR

Figure V.M-3
Schools in Proximity to Plan Area

There are only charter schools within the Plan Area boundary, including Envision Academy of Arts & Technology (authorized by Alameda County serving grades 9-12) and Oakland School for the Arts (authorized by OUSD serving grades 6-12).²⁰ Many other district-owned schools and charter schools are located within a 1-mile distance from the Plan Area boundaries near Lake Merritt and the eastern part of West Oakland and are easily accessible via walking, biking and transit. There is also a district-run school program serving the Plan Area: Gateway to College serving grades 9-12 at 900 Fallon Street, mainly aimed at assisting high school seniors in their pursuits for college.

OUSD continues to operate an options enrollment program every year. Families apply with ranked choices and a lottery assigns students to schools. Currently, the district has policies in place that give priority to siblings of current students and students who live in the attendance area boundary of a given school.

Dozens of OUSD schools are under-enrolled as of 2018, with nearly 11,000 empty seats in district-run schools.²¹ Future students living in the Plan Area may not necessarily attend nearby schools since OUSD allows any student to apply to any school in the district. Students are assigned to schools through a lottery based on the school choices indicated on their enrollment application and OUSD placement priorities.²²

Related to facilities, the school district's most significant challenge is the physical condition of the classroom facilities. Most are in need of substantial capital investments, estimated at approximately \$1.5 billion, to provide ongoing improvement to support a Full Service Community School District that serves children, youth, and their families.²³ According to the 2016 School Facility Fee Justification Report, these conditions eventually will impact the available capacity. Specifically, the District has determined that additional investment in capital facility projects are needed to address current and future requirements in three key areas:

- Full Service Community School Support
- Seismic Safety Enhancements
- Modernizations & Facility Upgrades

This condition exists regardless of the availability of classrooms to house students (including new development students), as substantial capital investment is required in the classroom facilities.

²⁰ Nana Xu, Director of Strategic Planning and Policy, Enrollment and Registration Management. Oakland Unified School District, 2019. Personal communication with Urban Planning Partners, February 9.

²¹ Oakland Unified School District (OUSD), 2019. Community of Schools Overview: Quality Schools in Every Neighborhood. Available at: <https://www.ousd.org/Page/18248>, accessed February 26, 2019.

²² Oakland Unified School District (OUSD), 2019. Enrollment Placement Priorities. Available at: <https://www.ousd.org/Page/17066/>, accessed February 13, 2019.

The District's justification for collecting fees on future residential and commercial/industrial development detailed in the 2016 School Facility Fee Justification Report includes the need for capital investment for existing facilities.

As authorized by California Government Code Sections 65995, 65996(a), and 65996(b), the OUSD collects school impact fees from developers of new residential and non-residential building space. The impact fee revenue is used together with other district funds (e.g., State grants, general obligation bonds) to complete capital improvements. As of 2016, OUSD collects a facilities fee of \$3.48 per square foot for residential development and \$0.56 per square foot for commercial development.²⁴

d. 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.²⁵ Many of these facilities are over 50 years old and some are over 100 years old.²⁶ The Oakland Public Library Draft Master Facilities Plan, released in 2006, identified a need for improved branch library services and the need for a revitalized and expanded Main Library.²⁷

Library facilities serving the Plan Area include:

- **Oakland Main Library.** Located at 125 14th Street, the Main Library has 350,000 reference and circulating books and 33 computers with internet access, in addition to magazine, newspaper, sheet music, and map collections. The library provides many services including computer training, tax assistance, lawyer assistance, homework assistance, and storytime.
- **African American Museum and Library.** Located at 659 14th Street, the African American Museum and Library consists of a unique non-circulating reference library of 12,000 volumes by or about African Americans and a second-floor museum that regularly hosts traveling and

²⁴ School Facility Source, 2016. School Facility Fee Justification Report for Residential, Commercial, and Industrial Development Projects for the Oakland Unified School District. Available at: <http://www.ousd.org/cms/lib07/CA01001176/Centricity/Domain/95/Oakland%20USD%20-%20Level%20I%202016%20FINAL%2006-06-2016.pdf>, accessed February 26, 2019.

²⁵ Oakland Public Library, 2019. Locations & Hours. Available at: <http://oaklandlibrary.org/using-library/locations-hours>, accessed March 11, 2019.

²⁶ Jamie Turbak, Director of Library Services. Oakland Public Library, 2019. Personal communication with Urban Planning Partners, January 28.

²⁷ Oakland Public Library, 2006. Master Facilities Plan – Feasibility Study of the Adaptive Reuse of the Kaiser Arena as a New Main Library Draft Report. Available at: <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/webcontent/oako49319.pdf>, accessed February 26, 2019.

original exhibitions highlighting art, history, and culture. The library owns 400 videos and DVDs, in addition to hosting a Seed Lending Library.

The Asian Branch library is also located in downtown in the Chinatown neighborhood at 388 9th Street, just outside of the Plan Area boundaries. The Asian Branch is equipped with computers with internet access and multilingual interface, and iPads for instructional purposes. The West Oakland Branch Library, located approximately 0.45 miles west of the western edge of the Plan Area boundary, contains circulating materials that are largely of popular interest, and has an extensive children's section focused on providing early literacy materials to children and their parents, as well as a growing teen collection of graphic novels for all ages. The West Oakland Branch is equipped with computers with internet access available for public use and a study room that can be reserved in advance.

Oakland Public Library gets funding primarily from the General Fund (about \$13M), Measure Q (about \$16M), and Measure D (about \$10M), as well as small amounts from grants and donations. Measure Q expires in 2024 which will cause a deficit if it is not reauthorized by the voters in that time. Measure D is a new parcel tax that was authorized by voters in June 2018 and generated enough money to eliminate the existing operating deficit. Measure D will help support minor facility improvements such as carpet, paint, furniture, electrical and data. However, per the ordinance, it cannot be used for new buildings.

There are currently no active plans to construct or expand existing facilities.²⁸ However, there is community demand for the following: a new Main Library, a new branch in Hoover-Foster neighborhood, a new branch in the San Antonio neighborhood, a permanent branch for Piedmont Avenue, a new location for the Tool Lending Library, and a need to expand or relocate the Asian Branch.²⁹

e. Parks and Recreation

The City's Open Space, Conservation, and Recreation Element (OSCAR)³⁰ sets a citywide goal of establishing 10 acres of total park land for each 1,000 residents, with 4 of those acres in local-serving parks. The OSCAR recognizes the difficulty in meeting the established goals—which it notes would be impossible without massive redevelopment—especially in built-out urban areas, but states that major gains toward the goal can be made through the expansion of existing parks,

²⁸ Jamie Turbak, Director of Library Services. Oakland Public Library, 2019. Personal communication with Urban Planning Partners, January 28.

²⁹ Ibid.

³⁰ City of Oakland, 1996. City of Oakland General Plan, Open Space, Conservation, and Recreation Element, June.

improvement of creek and shoreline access, acquisition of vacant parcels, and incorporation of new parks in major redevelopment projects.

The Office of Oakland Parks and Recreation has over 129 active/passive parks and/or open space covering 1,664 acres of open space. The Oakland Department of Parks, Recreation & Youth Development operates 22 recreation centers, 16 community gardens, 13 outdoor tennis courts, 3 golf courses, 38 athletic fields, 6 swimming pools, 8 rental facilities, 3 nature centers and discovery centers, and 2 boating and sailing centers.³¹

Open Space within the city limits also contributes to the City's parkland acreage goal. The East Bay Regional Park District (EBRPD), which acquires and develops regional parks, open spaces, and regional trails throughout the East Bay, also provides open space and recreational facilities within Oakland's city limits. EBRPD includes Leona Canyon Regional Open Space Preserve, Martin-Luther King Jr. Regional Shoreline Park, Redwoods Regional Park, and Sibley Volcanic Regional Preserve, and the Roberts Regional Recreational Area.³²

The City of Oakland includes 3,865 acres of park land—1,940 acres from the Oakland Office of Parks and Recreation, 1,664 acres from the East Bay Regional Park District, and 261 acres from the Port of Oakland. The existing total park acreage citywide is 9.1 acres per 1,000 residents. In total, there are 166 parks in the City of Oakland, with the median park size of 2.1 acres.³³ The projected park acreage citywide per resident after Plan buildout is 5.9 acres per 1,000 residents.³⁴ The existing total park acreage in the Plan area is 45.28 acres, which equals 1.8 acres per 1,000 residents. The projected park acreage in the Plan Area per resident after Plan buildout is 1.4 acres per 1,000 residents.³⁵

The Plan Area is situated within Downtown Oakland and contains a number of parks and plazas. Parks within the Plan Area include 25th Street Mini Park, Bishop Floyd L. Begin Plaza, Channel Park, Chinese Garden Park, Estuary Park, Jefferson Square, Lafayette Square Park, and Snow Park, and the Lake Merritt Channel Park (linear park) The Plan Area also encompasses one community-based cultural center, Malonga Casquelourd Center for the Arts; two open space

³¹ Oakland Parks, Recreation & Youth Development, 2019. Parks, Recreation & Youth Development. Available at: <https://www.google.com/maps/d/u/o/viewer?mid=1UeZm1UbaXCcCJ6Lpjxk51PDLDYvcX6k&ll=37.79115921285554%2C-122.2117383500002&z=12>, accessed March 11, 2019.

³² East Bay Regional Park District (EBRPD), 2013. Parks. Available at: <https://www.ebparks.org/parks/#nw>, accessed May 14, 2019.

³³ Trust for Public Land, 2018, City Characteristics (Oakland, CA), Available at: https://www.tpl.org/sites/default/files/city3/city3/tpl.OAK.8_16_18.pdf, accessed May 14, 2019.

³⁴ Using 650,630 for 2040 City of Oakland from 2040 ABAG projections. see *Chapter 5.I, Population and Housing*.

³⁵ Using 62,360 for 2040 Downtown/Jack London PDA from ABAG, see *Chapter 5.I, Population and Housing*.

plazas, Frank H. Ogawa Plaza and Henry J. Kaiser Memorial Park; and the Jack London Aquatic Center.³⁶

Lakeside Park is a region-serving park and includes a variety of smaller parks such as Snow Park. Amenities include children's play areas, a putting green, tennis courts and various recreational centers. While Lakeside Park is not within the Plan Area boundary, it touches the border and is a very important park for both residents of Oakland and the surrounding region.

Immediately adjacent to the Plan Area, Chinatown also has several parks such as Madison Square Park (special use park), and Lincoln Square Park and the Lincoln Square Recreation Center are located nearby on Harrison Street between 10th and 11th Streets.

The Parks Foundation completed an assessment of 51 community and neighborhood parks. Parks were evaluated in multiple categories, including picnic areas, outdoor sports areas, litter, and impact of homelessness, with a total of 47 rating questions. Jefferson Square and Lafayette Square are considered parks in jeopardy and are D rated.³⁷ In addition, Estuary Park Athletic Field has a C rating due to overuse, drought, streets, poor conditions of backstop fencing and bleachers, graffiti, and gopher damage.³⁸ Estuary Park is planned for expansion which will include an additional 4 acres (added to the existing 7 acres). New facilities will include a children's play area, picnic area, water-wise gardens, concession space, restrooms, seating areas, new formalized pathways, and a portion of the Bay Trail, as well as an improved flex field, parking, and boat storage. The current timeline for construction to begin is Spring 2022.³⁹ This expansion is independent of improvements as a result of the Specific Plan.

³⁶ Oakland Parks, Recreation & Youth Development, 2019. Map of City of Oakland Parks and Recreation Facilities and Recreation Centers. Available at: <https://www.google.com/maps/d/u/o/viewer?mid=1UeZm1UbaXCcCJ6Lpjxk5l1PDLDYvcX6k&ll=37.78772346793971%2C-122.25030494284795&z=13>, accessed February 12, 2019.

³⁷ Oakland Parks and Recreation Foundation, 2018. Continuing Crisis: The 2018 Report on the State of Maintenance in Oakland Parks.

³⁸ Dana Riley, Operation Manager. Oakland Parks, Recreation & Youth Development, 2019. Personal communication with Environmental Science Associates, which was then forwarded to Urban Planning Partners, February 21.

³⁹ Ibid.

2. Regulatory Setting

The following describes the State and local regulatory setting as it relates to public services and facilities.

a. State

(1) California Fire Code

The California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The provisions of the Fire Code apply to the construction, alternation, movement, enlargement, replacement, repair, equipment, use and occupancy, location maintenance, removal, and demolition of every building or structure throughout the State of California. The Fire Code includes regulations regarding fire resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, and fire safety during construction and demolition.

California Fire Code Section 403.2 addresses public safety for both indoor and outdoor gatherings, including emergency vehicle ingress and egress, fire protection, emergency medical services, public assembly areas and the directing of both attendees and vehicles (including the parking of vehicles), vendor and food concession distribution, and the need for the presence of law enforcement and fire and emergency medical services personnel at the event.

(2) Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50)

The Leroy F. Greene School Facilities Act of 1998, or Senate Bill 50 (SB 50), codified as California Government Code Sections 65995, 65996(a) and 65996(b), authorizes school districts to levy developer fees to finance the construction or reconstruction of school facilities.⁴⁰ The California State Legislature has determined that school impact fees shall be the exclusive method of mitigating the school facilities impacts of a project or plan, has set limits on school impact fees, and has determined that payment of school impact fees shall be deemed to provide full and complete school facilities mitigation. The City of Oakland charges an impact fee for schools on the behalf of Oakland Unified School District (OUSD) on developments during the building permit process. These funds are collected by the City and then give to OUSD. SB 50 also prohibits

⁴⁰ Eric Brunner, 2006. Financing School Facilities in California. Available at: <https://cepa.stanford.edu/sites/default/files/6-Brunner%283-07%29.pdf>, accessed February 13, 2019.

local agencies such as the City of Oakland from denying land use approvals on the basis that school facilities are inadequate.

(3) Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The dedication of land or in-lieu fees may be required for land or condominium subdivisions. The dedication of land or in-lieu fees is not to exceed the proportionate amount necessary to provide 3 acres of neighborhood and community parkland per 1,000 persons. Dedication requirements may be increased if the existing ratio of parkland per 1,000 persons at the time of adoption of a City's local park and land dedication and fees collected pursuant to the Quimby Act may only be used for developing new or rehabilitating existing park or recreational facilities. The City of Oakland does not have a park land dedication requirement pursuant to the Quimby Act, although it is an action to adopt the Quimby Act as part of the OSCAR. The City of Oakland instead, chose to charge an impact fee for Parks and Recreation, this is included as part of the Capital Improvements Impact Fees.

b. City of Oakland

(1) General Plan

The Oakland General Plan Land Use and Transportation (LUTE) contains the following policies that are relevant to the Specific Plan:

Policy N.2.2: Provision of government and institutional services should be distributed and coordinated to meet the needs of City residents.

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 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), use 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.

Policy N.12.5: In its capital improvement and public service programs, the City should give priority to reducing deficiencies in, and disparities between, existing residential areas.

The Oakland General Plan Safety Element contains the following policy and action relevant to the Specific Plan:

Policy FI-1: Maintain and enhance the City's capacity for emergency response, fire prevention and fire fighting.

- 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.

The Oakland General Plan Open Space, Conservation, and Recreation (OSCAR) Element contains the following policies and actions relevant to the Specific Plan:

Policy REC-3.1: Use level of service standards of 10 acres of total parkland and 4 acres of local-serving parkland as a means of determining where unmet needs exist and prioritizing future capital investments.

Policy REC-3.3: Consider a range of factors when locating new parks or recreational facilities, including local recreational needs, projected operating and maintenance costs, budgetary constraints, surrounding land uses, citizen wishes, accessibility, the need to protect or enhance a historic resource, and site visibility.

Policy REC-10.2: To the extent permitted by law, require recreational needs created by future growth to be offset by resources contributed by that growth. In other words, require mandatory land dedication for large-scale residential development and establish a park impact fee for smaller-scale residential development projects, including individual new dwelling units. Calculate the dedication of fee requirement based on standard of 4 acres of local-serving parkland per 1,000 residents.

- Action REC-10.2.1: Adopt an ordinance authorizing a Quimby Act parkland dedication and in-lieu/impact fee requirement. Prior to adoption, perform the necessary fiscal studies to determine the dollar amount of park impact fees to be charged for single family and multi-family dwellings. Following adoption, prioritize the expenditure of in-lieu fees collected from new development to ensure that the fees are spent in the appropriate areas.

Policy REC-S.4: Promote civic responsibility among residents in the care of Oakland's parks and encourage broad community participation in making parks safer.

In addition, the parks and recreation portion of the OSCAR Element contains the following principles applicable to the implementation of the Specific Plan and its associated development:

- Make provisions for sunlit plazas, pedestrian spaces, and "pocket" parks as downtown redevelopment occurs.
- Recreation needs created by new development should be offset by resources contributed by that growth. In other words, new development should pay its fair share to meet the increased demand for parks resulting from that development.

(2) Standard Conditions of Approval

The City's Standard Conditions of Approval (SCAs_ relevant to public services, facilities, and recreation are listed below. The SCAs are adopted as requirements for all projects approved within the City of Oakland.

SCA-PUB-1: Conformance with Other Requirements (#3)

The project applicant shall comply with all applicable federal, State, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Bureau of Building, Fire Marshal, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in SCA #4 (Minor and Major Changes).

SCA-PUB-2: Fire Safety Phasing Plan (#46)

The project applicant shall submit a Fire Safety Phasing Plan for City review and approval, and shall implement the approved Plan. The Fire Safety Phasing Plan shall include all of the fire safety features incorporated into each phase of the project and the schedule for implementation of the features.

When Required: Prior to approval of construction-related permit

Initial Approval: Oakland Fire Department

Monitoring/Inspection: Bureau of Building

SCA-PUB-3: Capital Improvements Impact Fee (#74)

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).

When Required: Prior to issuance of building permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section analyzes impacts related to public services, facilities, and recreation that could result from implementation of the Specific Plan and reasonably foreseeable development expected to occur under the Plan. The section begins with the criteria of significance, which establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the project and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

Implementation of the Specific Plan would result in a significant impact on the City's public services and recreation if it would:

1. Result in substantial adverse physical impacts associated with the provision of or 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: fire protection, police protection, schools, or other public facilities.

2. 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
3. Include recreational facilities or require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.

b. Analysis and Findings

The following policies from the Specific Plan would affect land use changes and direct growth in certain areas, thereby affecting the demand on public services. These policies were also analyzed for their overall impacts to public services and facilities.

Policy H-1.7: Ensure that a mix of market-rate and income-restricted housing is constructed in downtown. Target creation of between 4,365 and 7,275 (aspirational target) affordable housing units including units designated to accommodate larger families out of a total housing production target of 29,100 new units. The target breakdown of new affordable units by income range, based on the City's 2015-2023 RHNA, should be: 15% extremely low-income, 15% very low-income, 30% low-income and 40% moderate income

Policy H-1.8: Study an additional development density bonus for projects that provide housing units suitable for families with children—particularly three-bedroom units.

Policy H-1.9: Encourage the development of more commercial hotels downtown to relieve pressure to convert permanent housing units and SRO hotels to short-term tourist rentals.

Policy H-1.11: As part of the updates to zoning and development incentive program, adjust the zoning in identified areas of opportunity to create new high-intensity, mixed-use neighborhoods.

Per Specific Plan **Policy E-1.1**, funds generated from impact fees of new development under the Plan would help to mitigate impacts to over-capacity public services.

Policy E-1.1: Implement measures to ensure that new development provides funding and contributions such as impact fees, community-serving tenant, and other direct and indirect contributions, and enhances Oakland's ongoing fiscal sustainability to better fund City's services and community investment. Prioritize new funds generated by development to serve underserved communities, per future direction by the City Council. The City of Oakland has a Capital Improvement Impact Fee that can provide funding for capital expenses related to providing public services. The current Capital Improvement Program (CIP) provides new equity-based evaluation criteria that includes nine Priority Factors (Equity, Health and Safety, Existing Conditions, Economy, Environment, Required Work, Improvement, Collaboration and Shovel

Ready).⁴¹ City Council adopted a weighing system reflecting community values that will be used to prioritize capital projects in the development of subsequent CIP. Projects in the CIP reflect priority policies and the constraints of existing funding sources. They place a priority on preserving the City’s significant investment in existing infrastructure assets.⁴² The Capital Improvements Impact Fee provides funding for new, expanded, or improved facilities (not maintenance or operating costs associated with existing facilities) needed to provide expanded services, including those that may be triggered by new development.⁴³ Improvements that may be funded via this impact fee include public facilities that support fire protection, police protection, libraries, parks and recreation, and storm drain infrastructure. The Capital Improvements Impact Fee varies by zone and use and for residential by type of housing unit, ranging from \$0 per unit to \$4,000 per unit. Downtown is in Zone 1. Table V.M-1 shows the fees by unit type as well as by square foot for non-residential.

TABLE V.M-1 CAPITAL IMPROVEMENT IMPACT FEES IN ZONE 1

Use Type	Fee (based on date of building permit application)	
	7/1/19 to 6/30/2020	7/1/2020 to 6/30/21
Multi-Family (per unit)	\$1,250	\$1,250
Townhome (per unit)	\$3,000	\$3,000
Single-Family (per unit)	\$4,000	\$4000
Office (per sf)	\$1.00	\$2.00
Freestanding Retail (per sf)	\$0.25	\$0.50
Industrial (per sf)	\$0.75	\$1.00
Warehouse/Distribution (per sf)	\$1.00	\$1.00
Hotel/Motel (per sf)	\$0.35	\$0.60
Institutional (per sf)	\$2.50	\$3.00

Source: City of Oakland, Summary of City of Oakland Impact Fees, Effective September 1, 2016, Updated January 4, 2018. Available at: <http://www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak068467.pdf>, accessed June 28, 2019.

⁴¹ City of Oakland, 2018. Staff Report: Capital Improvement Program Prioritization Process, August 31.

⁴² City of Oakland, 2019. Proposed Capital Improvement Program, FY 2019-2021, June 18. Available at: <https://cao-94612.s3.amazonaws.com/documents/FY19-21-CIP-Proposed-Budget-Draft-06.18.19.pdf>, accessed June 28, 2019.

⁴³ Urban Economics, Hausrath Economics Group, BKF Engineers, and Fehr and Peers, 2016. Oakland Transportation and Capital Improvements Impact Fee Nexus Analysis, March 10.

(1) Public Services and Government Facilities (Criterion 1)

Implementation of the Specific Plan and its associated development will result in substantial growth in the Specific Plan Area and it is likely that new or expanded governmental facilities would be needed as the plan builds out, but it is not yet known what specific facilities will be needed and/or how such improvements would be funded. The City does not anticipate that the current Capital Improvement Fee will be adequate to fund the construction of new or expanded facilities needed to serve the growth within the Plan Area and greater downtown. Fiscal impacts are generally not within the scope of CEQA as the CEQA thresholds focus on impacts related to whether the construction of new or expanded facilities needed to maintain service ratios and response times could cause significant environmental impacts. As part of the Plan implementation, the City is considering an increased impact fee specific to downtown that would provide additional funding for fire, police, libraries, and parks. One particular implementation action is to invest in youth-driven programming and facilities for downtown public spaces, emphasizing libraries and the role they serve and focusing on black youth. Youth service provider focus group participants cited as feeling least welcome (addressing Plan Policy CH-1.3 and C-1.9). Another action is to invest in the creation of new and improved public spaces that can be used to host festivals and gatherings and that feature public art, which helps to address Plan Policy C-2.2, C-2.3, and CH-1.1. A discussion of each service is provided below.

Fire Protection

The increase in development intensity and overall density in the Plan Area and its vicinity would result in an increase in demand for fire protection and emergency services. The Specific Plan would provide for the development of up to an additional 29,100 new residential units and 20,060,000 square feet of commercial space, resulting in an estimated potential for up to 52,600 new residents and 60,730 employees in the Plan Area. The existing population in the Plan Area from 2013-2017 is approximately 19,219 (as described further in *Section V.L, Population and Housing*). The Plan Area's growth is aligned with citywide growth and would account for about 20 percent of Oakland's total projected population growth between 2020 and 2040 (excluding active development projects that would result independent of the Specific Plan).

As described in the subsections above, the OFD is meeting its response time goal of 7 minutes 90 percent of the time in the Downtown/Lake Merritt area, but is experiencing delayed response times in the Jack London District south of the UPPR tracks, with a 7-minute response time 67 percent of the time, and an average 9 minute and 2 seconds response time 90 percent of the

time.⁴⁴ OFD has also indicated that they frequently experience delays responding to waterfront incidents due to freight trains. While OFD maintains adequate response in the Downtown/Lake Merritt area, the increase in population that could occur as part of the Plan (29,100 new residential units) may increase response times within the area and cause delays south of the UPRR tracks with an increase in call volumes. In addition, as discussed in the setting subsection above, Fire Station 2, which is located in the Plan Area, is scheduled to re-open in 2019 to serve as a temporary station during planned fire station remodels and construction projects in the City for an estimated 5- to 7-year duration but then is planned to be demolished.

A replacement fire station for Station 2 is planned as part of the Waterfront Ballpark District Howard Terminal EIR (Howard Terminal Project). The reopening and then eventual replacement of this station would improve service throughout the Plan Area, particularly within the DJL area and help ensure that the desired response times of within 7 minutes of notification 90 percent of the time can be maintained. With the reopening of fire station 2, response times would be under the 7 minutes of notification 90 percent of the time (4 minutes and 40 seconds for structure fire calls, and 6 minutes and 54 seconds for high priority medical calls) with the proposed population and employment under the Specific Plan.⁴⁵ In addition, future development projects that would occur under the Specific Plan would be required to meet all City of Oakland and California State Fire Code requirements for sprinkled systems, alarms, fire flow, access, and fire hydrant spacing, in accordance with SCA-PUB-1: Compliance with Other Requirements (#3) and SCA-PUB-2: Fire Safety Phasing Plan (#46).

Additionally, both commercial and multi-family residential development under the Specific Plan would result in substantial generation of new property taxes and other fees, including transient occupancy tax, business license tax, utility user tax, and sales tax revenues associated with new resident and employee spending. These revenues go into the City's General Fund and thus would provide more resources to cover the increased budget for fire services. Additionally, Specific Plan **Policy H-1.9** specifically references the development of commercial hotels which would further support increased revenue generation under the Plan.

Per Specific Plan **Policy E-1.1**, funds generated from impact fees of new development under the Plan would also be directed to prioritize underserved communities, further helping to mitigate impacts to over-capacity fire protection.

⁴⁴ Deccan International, 2019. Baseline Performance for Oakland Fire Department: January 2018-December 2018, April 23, 2019.

⁴⁵ Deccan International, 2019. Projected Response in Downtown with Downtown Oakland Specific Plan, August 2019, and correspondence with Chief Melinda Drayton, OFD on August 22, 2019.

While development under the Plan would result in an increased demand for fire protection and emergency medical response services, construction of a replacement fire station (as part of the Howard Terminal Project), it is anticipated that the planned facilities independent of this project would provide adequate facilities to serve future development (south of the UPPR tracks). In the event that the Howard Terminal Project does not move forward, an additional fire station may be needed to serve the Plan Area. Without the re-opening of fire station 2, response times for fire calls would be under the 7-minute notification 90 percent of the time (4 minutes and 56 seconds for structure fire calls). For high priority medical calls without the re-opening of fire station 2, response times would be at 7 minutes with the proposed population and employment under the Specific Plan, and would result in seven additional seconds from current deployment.⁴⁶ In addition, the increase in number of incidents per year would increase substantially for other fire stations in and around the Plan Area. For the most part, any potentially adverse effects from new fire facilities would be similar to those anticipated by development under the Plan, such as noise, air quality impacts such as emissions of dust and air pollutants including diesel exhaust, and temporary street closures or other traffic obstructions. Furthermore, even if a fire facility was required to service the increased population or employees that result from development under the Specific Plan, 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 fire construction or expansion are typically categorical exemptions or negative declarations. Overall, potential impacts associated with the construction of new fire facilities, should new facilities be required, would be similar to those associated with development under the Plan.

Police Protection

The project would result in an increased demand for OPD. The addition of residents and employees to the city's population (52,600 new residents and 60,730 employees) would cause the sworn member-per-resident ratio to increase, and potentially increase the ratio of violent crimes-per-sworn member. The increased population would increase the number of calls for service within Beat 1X, Beat 3X, Beat 3Y, Beat 4X, and Beat 8X.

In 2018, the Oakland Police Department had 747 sworn officers, averaging 1 officer per 537 residents. Staffing and equipment levels have not been adequately maintained to be current with the demands of services.⁴⁷ While the increase in demand would potentially trigger the need to staff additional police to achieve officer-to-resident ratios and maintain acceptable response

⁴⁶ Deccan International, 2019. Projected Response in Downtown with Downtown Oakland Specific Plan, August 2019, and correspondence with Chief Melinda Drayton, OFD on August 22, 2019.

⁴⁷ Timothy Birch, Police Services Manager. Oakland Police Department, 2019. Personal communication with Urban Planning Partners, February 8.

times, it would not directly trigger the need for additional police facilities.⁴⁸ OPD staffing levels are completely budget-driven, and facilities would only need to be expanded or constructed if there are increases in both staffing and accompanying equipment.

Both commercial and multi-family residential development under the Specific Plan, would result in substantial generation of new property taxes and other fees, including transient occupancy tax, business license tax, utility user tax, and sales tax revenues associated with new resident and employee spending. These revenues go into the City's General Fund and thus would provide more resources to cover the increased budget for police services. Additionally, **Specific Plan Policy H-1.9** specifically references the development of commercial hotels which would further support the increased revenue generation under the Plan.

Per Specific Plan **Policy E-1.1**, funds generated from impact fees of new development under the Plan would also be directed to prioritize underserved communities, further helping to mitigate impacts to over-capacity police protection.

In addition, by revitalizing and activating the Planning Area, the Specific Plan may help reduce crime as more people are brought in the areas on a more constant basis, municipal services and infrastructure are upgraded, and newer development incorporate crime prevention through environmental design (CEPTD) principles and up-to-date security features and technology. In addition, the potential economic growth and revitalization, and increased employment and housing resulting from Specific Plan may serve to reduce crime.

As stated above, each development project that occurs under the Specific Plan would generate a net increase in property taxes and other fees providing additional monies for the City's General Fund to cover costs associated with increased operational costs such as additional police and fire personnel. Payment of the Capital Improvements Impact Fee, SCA-PUB-3: Capital Improvements Impact Fee (#74) would assist in funding new, expanded, or improved facilities (not maintenance or operating costs) needed to provide expanded services, including those that may triggered by new development⁴⁹

Even if a new police station or other facility was required to service the increased population or employees resulting from development that occurs under the Specific Plan, 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 police station construction or expansion are typically categorical exemptions or negative declarations.

⁴⁸ Ibid.

⁴⁹ Urban Economics, Hausrath Economics Group, BKF Engineers, and Fehr and Peers, 2016. Oakland Transportation and Capital Improvements Impact Fee Nexus Analysis, March 10.

The need for additional police officers or other staff would not trigger a significant impact under CEQA unless a new facility would be needed, the construction of which would result in a significant impact. An economic or social change by itself shall not be considered a significant effect on the environment.⁵⁰ Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to police services.

Schools

Future development that would occur under the Specific Plan is estimated to include up to 29,100 residential units within the Plan Area, likely increasing the school enrollment at schools within OUSD. The existing population in the Plan Area from 2013-2017 is approximately 19,219 (as described further in *Section V.L, Population and Housing*). The Plan Area's growth is aligned with citywide growth, and would account for about 20 percent of Oakland's total projected population growth between 2020 and 2040.

Using the school district's student generation rate of 0.274 students per residential housing unit, the 29,100 residential units expected under implementation of the Specific Plan would lead to approximately 7,973 new students in the district.⁵¹ Students living in the Plan Area would also be able to apply to any school in the district since OUSD is a "choice district" where students are assigned to schools through a lottery based on the school choices indicated on their enrollment application and OUSD placement priorities.⁵²

As described above, dozens of OUSD schools are currently under-enrolled as of 2019, with nearly 11,000 empty seats in district-run schools.⁵³ The OUSD confirmed that the school system has adequate capacity for new students resulting associated with future development projects that would occur under the Specific Plan.⁵⁴ Although no OUSD-owned schools are currently located within the Plan Area, many OUSD schools, at all levels, are in close proximity to the Plan Area

⁵⁰ Briscoe, Ivester, and Bazel, 2012. A Project's Need For Public Services Is Not an Environmental Impact Requiring Mitigation. Written July 10. Available at: <https://briscoelaw.net/07-10-12/>, accessed May 14, 2019.

⁵¹ School Facility Source, 2016. School Facility Fee Justification Report for Residential, Commercial, and Industrial Development Projects for the Oakland Unified School District. Available at: <http://www.ousd.org/cms/lib07/CA01001176/Centricity/Domain/95/Oakland%20USD%20-%20Level%20I%202016%20FINAL%2006-06-2016.pdf>, accessed February 10, 2019.

⁵² Oakland Unified School District (OUSD), 2019. Enrollment Placement Priorities. Available at: <https://www.ousd.org/Page/17066/>, accessed February 13, 2019.

⁵³ Oakland Unified School District (OUSD), 2018. Community of Schools: Quality Schools in Every Neighborhood. Available at: <https://www.ousd.org/Page/18248>, accessed February 13, 2019.

⁵⁴ Nana Xu, Director of Strategic Planning and Policy, Enrollment and Registration Management. Oakland Unified School District, 2019. Personal communication with Urban Planning Partners, February 9.

and easy accessible via walking, biking, and transit (AC Transit operates more than 25 buses throughout Oakland that provide direct service (for students) to the OUSD's K-12 schools.

Although the District has adequate classroom capacity, current classroom facilities require substantial capital investments in order to provide ongoing improvement to support a Full Service Community School District that serves children, youth and their families. Future residential and commercial/industrial development in the District will generate additional students and, consequently, a need for additional school facilities. A relationship exists, therefore, between the District's need to build additional school facilities and the construction of new residential and commercial/industrial development projects.

As authorized by California Government Code Sections 65995, 65996(a), and 65996(b), the OUSD collects school impact fees from developers of new residential and non-residential building space. The impact fee revenue is used together with other district funds (e.g., State grants, general obligation bonds) to complete capital improvements. As of 2016, OUSD collects a facilities fee of \$3.48 per square foot for residential development and \$0.56 per square foot for commercial development.⁵⁵

Although adoption and development under the Specific Plan would increase resident populations and student enrollment in Oakland at incremental rates over a long timeframe, the payment of school facilities fees mandated by California Government Code Sections 65995, 65996(a), and 65996(b) is deemed full and complete mitigation.

Individual development projects as a result of the Specific Plan would be expected to pay for school impact fees. With the payment of fees, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to schools.

Libraries

Existing staff levels are adequate for current demand to library service, but many facilities within the system are inadequate or insufficient for optimal public service.^{56, 57} OPL does not have any

⁵⁵ School Facility Source, 2016. School Facility Fee Justification Report for Residential, Commercial, and Industrial Development Projects for the Oakland Unified School District. Available at: <http://www.ousd.org/cms/lib07/CA01001176/Centricity/Domain/95/Oakland%20USD%20-%20Level%201%202016%20FINAL%2006-06-2016.pdf>, accessed February 26, 2019.

⁵⁶ Jamie Turbak, Director of Library Services. Oakland Public Library, 2019. Personal communication with Urban Planning Partners, January 28.

⁵⁷ Jamie Turbak, Director of Library Services. Oakland Public Library, 2019. Personal communication with Environmental Science Associates, February 2.

performance standards that are tied to level of demand. It is anticipated residents within the Plan Area would primarily patronize the Main Library, the African American Museum & Library, and the Asian Branch libraries due to the proximity of these facilities to the Plan Area. Future development projects that would occur under the Specific Plan would cause an increase in the demand for library services due to the addition of 52,600 residents.

LUTE Policy N2.2 states that provisions of services by civic and institutional uses should be distributed and coordinated to meet the needs of city residents. Adherence to this policy would reduce the potential impact on libraries to less than significant. There are currently no active plans to construct new or expanded facilities; however there is a demand for the following: a new Main Library, a new branch in the Hoover-Foster neighborhood, a new branch in the San Antonio neighborhood, a permanent branch for Piedmont Avenue, a new location for the Tool Lending Library, and new or expanded Asian branch.⁵⁸

Both commercial and multi-family residential development under the Specific Plan would result in substantial generation of new property taxes and other fees, including transient occupancy tax, business license tax, utility user tax, and sales tax revenues associated with new resident and employee spending. These revenues go into the City's General Fund and thus would provide more resources to cover the increased budget for fire services. Additionally, **Specific Plan Policy H-1.9** specifically references the development of commercial hotels which would further support the increased revenue generation under the Plan.

Per Specific Plan **Policy E-1.1**, funds generated from impact fees of new development under the Plan would also be directed to prioritize underserved communities, further helping to mitigate impacts to over-capacity libraries.

Implementation of Plan **Policy C-1.9** would encourage additional investment and improvement in libraries.

Policy C-1.9: Work with the Library's Master Facilities Plan to propose branch libraries in areas where they are needed and propose a new site for or expansion of the Main Library; prioritize funding improvements to the Community Room at the Main Library and adjacent plazas to support more small-scale events; and expand the library's tool lending services as part of supporting maker space activities and programming through the Main Library.

As stated above, each development project that occurs under the Specific Plan would generate a net increase in property taxes and other fees providing additional monies for the City's General

⁵⁸ Jamie Turbak, Director of Library Services. Oakland Public Library, 2019. Personal communication with Urban Planning Partners, January 28.

Fund to cover costs associated with increased operational costs such as additional police and fire personnel. While the Specific Plan has policies that would encourage investment and improvements to libraries, as well as capital improvements that would be received as part of the development of projects pursuant to SCA-PUB-3: Capital Improvements Impact Fee (#74), these fees would not be enough to provide expanded services, including those that may be triggered by new development.

However, even if a library facility was required to service the increased population or employees resulting from development that occurs under the Specific Plan, 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 library construction or expansion are typically categorical exemptions or negative declarations.

The need for additional library staff would not trigger a significant impact under CEQA unless a new facility would be needed, the construction of which would result in a significant impact. An economic or social change by itself shall not be considered a significant effect on the environment.⁵⁹ Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to libraries.

(2) Parks and Recreational Facilities (Criterion 2, and 3)

Impact PUB-1: Development under the Specific Plan could increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of that facility would occur or be accelerated, or would require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment. (S)

Future development occurring under the Specific Plan would introduce up to approximately 52,600 new residents that would use both neighborhood and community parks in the area. These additional residents would increase demand for, and use of, neighborhood parks and recreational centers serving the Plan Area and its vicinity. The existing population in the Plan Area from 2013-2017 is approximately 19,219 (as described further in *Section V.L, Population and Housing*). The Plan Area's growth is aligned with citywide growth, however, and would account for about 20 percent of Oakland's total projected population growth between 2020 and 2040 (excluding active development projects that would result independent of the Specific Plan).

⁵⁹ Briscoe, Ivester, and Bazel, 2012. A Project's Need For Public Services Is Not an Environmental Impact Requiring Mitigation. Written July 10. Available at: <https://briscoelaw.net/07-10-12/>, accessed May 14, 2019.

Both commercial and multi-family residential development under the Specific Plan, would result in substantial generation of new property taxes and other fees, including transient occupancy tax, business license tax, utility user tax, and sales tax revenues associated with new resident and employee spending. These revenues go into the City's General Fund and thus could provide more resources to cover the increased budget for parks and recreation. As stated above, each development project that occurs under the Specific Plan would generate a net increase in property taxes and other fees providing additional monies for the City's General Fund to cover costs associated with increased operational costs such as additional police and fire personnel. Payment of the Capital Improvements Impact Fee SCA-PUB-3: Capital Improvements Impact Fee (#74) would assist in funding new, expanded, or improved facilities (not maintenance or operating costs) needed to provide expanded recreational centers and facilities, including those that may triggered by new development.⁶⁰

Additionally, **Specific Plan Policy H-1.9** specifically references the development of commercial hotels which would further support the increased revenue generation under the Plan.

Implementation of Plan Policy C-2.2, CH-1.4, CH-1.5, and E-1.1 would encourage additional investment and improvement in parks and recreational facilities within the Plan Area and its vicinity, such as the creation of the Webster Green.

Policy C-2.2: Invest in the creation of new and improved public spaces that can be used to host festivals and cultural gatherings, and that feature public art.

Policy CH-1.1: Working with the community, prioritize and implement public realm improvements to create a more connected and accessible network of inclusive high-quality public open spaces downtown. Figure CH-1 identifies potential public space improvements recommended in the Downtown Oakland Specific Plan. Following Plan adoption, this map can be updated at regular intervals with community input to guide implementation.

Policy CH-1.4: Study updates to the City's open space development regulations, considering revisions to result in publicly accessible rather than private space, allowing required open space to be built off-site, update capital improvements impact fees, and/or implementing a parkland dedication fee. The selection strategy should ensure that fees are available for maintenance.

Policy CH-1.5: Update Landscaping and Lighting Assessment District (LLAD) fees to fund maintenance of existing and planned parks and public spaces.

⁶⁰ Urban Economics, Hausrath Economics Group, BKF Engineers, and Fehr and Peers, 2016. Oakland Transportation and Capital Improvements Impact Fee Nexus Analysis, March 10.

Policy E-1.1: Implement measures to ensure that new development provides funding and contributions such as impact fees, community serving tenants, and other direct and indirect contributions, and enhances Oakland's ongoing fiscal sustainability to better fund City's services and community investment. Prioritize new funds generated by development should be prioritized to serve underserved communities, per future direction by the City Council.

While the Specific Plan has policies that would encourage investment and improvements to parks and recreational facilities, as well as capital improvement fees that would be received as part of the development of projects as part of the Specific Plan, these would not be enough to mitigate the impacts related to physical deterioration of existing facilities. As described in the setting subsection above, several of the parks in and near the Plan Area were poorly rated by the Oakland Parks Foundation due to overuse, drought, poor conditions, graffiti, and gopher damage. In addition, many parks in downtown as well as in the rest of the city are suffering from the impact of tents and encampments that limited the use of existing parks.

The city currently does not meet the OSCAR's goal of 10 acres of total park land for each 1,000 residents, as currently the total park acreage citywide is 9.1 acres per 1,000 residents. The projected park acreage citywide per resident after Plan buildout is 5.9 acres per 1,000 residents. The amount of acreage of parks in downtown is small in comparison to other parts of the city, and with the projected increase in population, the existing overused parks will become increasingly more overused.

Using the City ratio of 4 acres of local-serving parkland per 1,000 residents, the approximate addition of 52,600 residents under the Plan would yield an increased demand of approximately 210.4 acres of parkland in the Plan Area. The City would continue to fall short of its local-serving parkland goal of 4 acres per 1,000 residents, regardless of adoption and development under the Specific Plan.

The following two-tier mitigation measure is proposed.

Mitigation Measure PUB-1: Part 1) Requires the city to update the Capital Improvement Impact fees, and/or implement a dedicated impact fee specific to parks and recreation. **Part 2)** Requires the city to create a Privately Owned Public Spaces (POPOS) program so that outdoor and indoor spaces can be provided for public enjoyment by private owners in exchange for bonus floor area or waivers. (LTS)

Impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to recreation with implementation of Mitigation Measure PUB-1.

c. Cumulative Public Services, Facilities, and Recreation Impacts

The Specific Plan and cumulative projects would incrementally increase the demand for public services in the areas of fire, police, schools, libraries, and recreation. Many of these services are subject to an annual budgeting process 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. Impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area as well as cumulative impacts over the next 20 years would be less than significant related to recreation with implementation of Mitigation Measure PUB-1.

No other cumulative impacts to these services, other than recreation, are anticipated that would result in adverse physical impacts associated with the maintenance of service standards.

(1) Public Services and Government Facilities

The impacts of increased service demand for fire protection, police protection, libraries, and parks and recreation would be offset by revenue generated by taxes and fees, as well as a Specific Plan policy. Both commercial and multi-family residential development under the Specific Plan would result in substantial generation of new property taxes and other fees, including transient occupancy tax, business license tax, utility user tax, and sales tax revenues associated with new resident and employee spending. These revenues go into the City's General Fund and thus would provide more resources to cover the increased budget for fire services, police services, library services and parks and recreation. Additionally, Specific Plan **Policy H-1.9** specifically references the development of commercial hotels which would further support the increased revenue generation under the Plan.

This policy would contribute to lessening cumulative impacts to fire, police, library, and parks and recreation services.

Regarding schools, individual development 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. **Policy H-1.7** would encourage a mix of market-rate and income-restricted housing in downtown, which would lead to less demand on school facilities since multi-family housing generate less enrollment demand than single-family homes, further lessening

cumulative impacts to OUSD schools.⁶¹ Therefore, the effect of the Specific Plan on schools in combination with other foreseeable development, would not be cumulatively significant.

(2) Parks and Recreation

Cumulative Impact PUB-1: Development under the Specific Plan, and reasonably foreseeable future projects could increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of that facility would occur or be accelerated, or would require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment. (S)

Mitigation Measure Cumulative PUB-1: Implement Mitigation Measure PUB-1. (LTS)

Growth from adoption and development under the Specific Plan, in combination with other past, present, and reasonably foreseeable future projects in the Plan Area and vicinity, would contribute to a cumulatively considerable deficit of local-serving parkland per resident. Implementation of Specific Plan **Policy C-2.2, , CH-1.4, CH-1.5, and E-1.1** would encourage additional investment and improvement in the parks and recreational facilities within the Plan Area and its vicinity and with implementation of Mitigation Measure PUB-1, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years in combination with other foreseeable development would not be cumulatively significant.

⁶¹ Nana Xu, Director of Strategic Planning and Policy, Enrollment and Registration Management. Oakland Unified School District, 2019. Personal communication with Urban Planning Partners, February 9.

N. UTILITIES

This section describes the current utilities and service systems in the Plan Area and its vicinity and analyzes how implementation of the Specific Plan and its associated development may affect those conditions. Specific Plan, existing City policies, and Standard Conditions of Approval (SCAs) that would reduce potential impacts are identified. No additional mitigation measures were determined necessary.

1. Setting

This section describes the existing utilities, infrastructure, capacities, and expansion possibilities in the vicinity of the Plan Area.

a. Wastewater (Sanitary Sewer) System

The City provides citywide sanitary sewer collection services to the Plan Area, while EBMUD provides sewage transport, treatment, and discharge services. These services and existing infrastructure are described below.

(1) Wastewater Collection System

The City's sewer collection system is divided into basins and sub-basins. Sub-basins encompass a specific physical area, and sewer flows within a sub-basin are assigned to a single discharge point from the City's collection system into EBMUD's interceptor lines.¹ The Plan Area spans across multiple sub-basins and is currently served by existing sewer infrastructure located beneath surrounding roadways.²

Sewer discharge from buildings within Oakland flows through lateral lines to the City's sewer network, which is mostly gravity fed. Currently, the City operates and maintains approximately 930 miles of sewer lines, 29,000 structures, and 7 pump/lift stations.³ Most of the City's wastewater collection system is 50 years old, with some of the existing infrastructure dated over 100 years.⁴ The sewer network is connected directly to trunk lines that convey sewage flows to EBMUD wastewater interceptors and finally to the Municipal Waste Water Treatment Plant

¹ East Bay Municipal Utility District (EBMUD), 2015. Urban Water Management Plan 2015. Water Resources Planning Division, January 10, 2019.

² City of Oakland, 2017. Public Works Infrastructure Map. Available at: <https://oakbec.s3.amazonaws.com/MapLanding/maps/DEC.html#>, accessed February 4, 2019.

³ City of Oakland, 2019. Sanitary Sewers. Available at: <https://www.oaklandca.gov/topics/sanitary-sewers>, accessed February 26, 2019.

⁴ Ibid.

located in West Oakland. EBMUD wastewater interceptors consist of 29 miles of reinforced concrete pipes ranging from 1 to 9 feet in diameter.⁵

Infiltration of stormwater into the aging sanitary sewer system from misconnections, cracks, and other imperfections in system pipes, joints, and manholes can cause a 10-fold increase in the volume of wastewater that reaches EBMUD's sewer interceptor pipes and the Municipal Waste Water Treatment Plant. The City of Oakland (City)'s infiltration/inflow (I/I) correction program consists of a 25-year capital improvement program to rehabilitate 25 percent of the sewer system sub-basins based on greatest to least infiltration and inflow of rainwater problems, work which was completed in 2014. The program also includes a year-by-year prioritization of projects.⁶

A federal consent decree, negotiated among EBMUD, the Satellite Agencies, the U.S Environmental Protection Agency, the State Water Resources Control Board, (SWRCB), and the Regional Water Quality Control Board (RWQCB), requires EBMUD and the Satellite Agencies to eliminate Wet Weather Facilities discharges by 2036. To meet this requirement, actions will need to be take over time to reduce I/I, eliminating discharges from EBMUD wet-weather facilities. The consent decree, a regional agreement to settle a lawsuit filed by the U.S Environmental Protection Agency, was reached to significantly improve the aging sewer infrastructure and protect the San Francisco Bay from sewage spills. The 2014 agreement, called the Landmark Clean Water Agreement, is a regional collaboration of EBMUD, the cities of Oakland, Alameda, Albany, Berkeley, Emeryville, and Piedmont, and the Stege Sanitary District.⁷ It requires EBMUD to continue implementation of its Regional Private Sewer Lateral Ordinance (further discussed below in regulatory setting), construct various improvements to its interceptor system, and identify key areas of inflow and rapid infiltration over a 22-year period.⁸

Over the same period, the Landmark Clean Water Agreement requires the Satellite Agencies to perform I/I reduction work, including sewer main rehabilitation and inspection at specified intervals that this work has resulted in a pre-determined level of reduction in Wet Weather Facilities discharges. If enough I/I reductions are not achieved, additional investment into the region's wastewater infrastructure would be required, which may result in significant financial implications for East Bay residents.

Oakland has committed to several project deliverables under the Landmark Clean Water Agreement, many of which were already in place, and will be assessed and monitored over the

⁵ East Bay Municipal Utility District (EBMUD), 2015. Urban Water Management Plan 2015. Water Resources Planning Division.

⁶ City of Oakland, 2017. Adopted Capital Improvement Projects, Fiscal Year 2017-2019.

⁷ City of Oakland, 2014. Landmark Clean Water Agreement. Available at: <http://www2.oaklandnet.com/government/o/PWA/s/Sewer/ConsentDecree/index.htm>, accessed March 15, 2019.

⁸ David Rehnstrom, 2019. East Bay Municipal Utility District (EBMUD) comment letter response to Notice of Preparation of a Draft Environmental Impact Report for the Downtown Oakland Specific Plan.

22-year period of the agreement. Some of these include rehabilitating 13 miles of sewer pipes per year, cleaning 140 miles of sewer pipes per year, inspecting 92 miles of sewer pipes per year, and eliminating high priority storm water inflow sources within two years wherever found.⁹

(2) Wastewater Treatment Facilities

EBMUD provides domestic, commercial, and industrial wastewater treatment services to approximately 685,000 people in a service district known as Special District No.1, an 83-square-mile area of Alameda and Contra Costa counties. EBMUD owns and operates a network of 15 wastewater pumping stations (with 0.5- to 54.7-mgd capacity) and 8 miles of force mains that convey wastewater to the Municipal Wastewater Treatment Plant located at 2020 Wake Avenue in Oakland.¹⁰ The City's collection system connects with EBMUD's sewer interceptor system and transports sewage to the EBMUD Municipal Wastewater Treatment Plant. The Municipal Wastewater Treatment Plant provides both primary and secondary treatment of wastewater.

The Municipal Wastewater Treatment Plant provides primary treatment for up to a peak flow of 320 mgd and secondary treatment for a maximum flow of 168 mgd. Storage basins provide plant capacity for a short-term hydraulic peak of 415 mgd. The average annual daily flow into the treatment plant is approximately 63 mgd.¹¹

Treated water is disinfected, dechlorinated, and discharged through an outfall 1 mile off the East Bay shore into the San Francisco Bay. Solids are pumped to digesters for stabilization and are then dewatered and hauled offsite. Methane generated by the digesters is used to produce renewable energy. There are no planned improvements to the wastewater treatment plant that would affect treatment capacity.

As previously mentioned, EBMUD recycles water at its main wastewater treatment facility and has done so since the early 1970s. Recycled water is suitable for land uses that do not require potable water sources, such as industrial uses and certain landscaped areas. According to the Urban Water Management Plan, EBMUD provided approximately 8.6 mgd of recycled water to customers in 2015 and has a goal to recycle 20 mgd by 2040.¹² Incentives used by EBMUD to encourage customers to utilize recycled water include rate discounts on recycled water, long-

⁹ City of Oakland, 2014. Landmark Clean Water Agreement. Available at: <http://www2.oaklandnet.com/government/o/PWA/s/Sewer/ConsentDecree/index.htm>, accessed March 15, 2019.

¹⁰ East Bay Municipal Utility District (EBMUD), 2016. Sewers, Sewer System Management Plans, East Bay Sewer System Management Plan. Available at: <https://www.ebmud.com/wastewater/collection-treatment/sewers/>, accessed February 26, 2019.

¹¹ East Bay Municipal Utility District (EBMUD). Wastewater Treatment. Available at: <https://www.ebmud.com/wastewater/collection-treatment/wastewater-treatment>, accessed February 26, 2019.

¹² East Bay Municipal Utility District (EBMUD), 2015. Urban Water Management Plan 2015. Water Resources Planning Division.

term contracts, grants, and low-interest loans used to retrofit buildings so that they can accommodate recycled water.

b. Stormwater Drainage System

The Alameda County Flood Control & Water Conservation District was created in 1949 by the State Legislature to provide flood control and conservation services to Alameda County. The District's flood control infrastructure includes hundreds of miles of pipelines, channels, creeks, erosion control measures, and pump stations. The city of Oakland is located within Zone 12, which also includes the city of Emeryville, and is the largest of the Alameda County Flood Control & Water Conservation District's zones. Zone 12 has approximately 50 miles of closed conduit, approximately 12 miles of earthen and concrete channels, as well as 18 miles of existing natural waterways.¹³

The Plan Area spans across three watersheds: Glen Echo Creek Watershed in the north, West Oakland Watershed in the western central portion of the Plan Area, and Oakland Estuary Watershed covering a majority of the central and southern portion of the Plan Area.¹⁴ Pump stations, operated by the Alameda County Public Works Agency, transfer stormwater, groundwater, irrigation drainage, and transient street runoff to flood control bays and channels.¹⁵ Zone 12 contains five pump stations (Lake Merritt, Ettie, McKillop, Hardy, and Temescal) that lift stormwater to the Bay. Because the Plan Area is relatively flat and mostly developed with impervious surfaces, most of the stormwater runoff collected within the area flows through underground pipes and culverts to eventually drain into the San Francisco Bay.

The City of Oakland is responsible for the operation and maintenance of the local storm drainage system in the Plan Area. The City's storm drainage system 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). These facilities are both publicly and privately owned. City-owned drainage systems are typically located within easements and rights-of-way.¹⁶

The City's existing 2006 Storm Drainage Master Plan has fallen out of date and the storm drainage system needs maintenance, repairs, and upgrades. The Storm Drainage Master Plan states that demand and burden on the system have increased due to infill development and that normal storm events as well as El-Nino-type events had led to increasing instances of flooding,

¹³ Alameda County Flood Control and Water Conservation District (ACFCD), 2019. Zone 12. Available at: <https://www.acfloodcontrol.org/floodplain-management/neighborhood-zones/zone-12/>, accessed February 26, 2019.

¹⁴ Ibid.

¹⁵ Alameda County Public Works Agency (ACPWA). Pump Stations. Available at: <https://www.acpwa.org/pas/pump-stations>, accessed February 26, 2019.

¹⁶ City of Oakland, 2014. Bureau of Engineering and Construction, Storm Drainage Design Standards. Available at: <https://www.oaklandca.gov/resources/storm-drainage-design-standards>, accessed January 9, 2019.

erosion and property damage. The Storm Drainage Master Plan indicates that storm drainage structures within the Plan Area, were observed to have 2-4 inches in most areas, 4-6 inches in a few locations and more than 6 inches of debris accumulation in 2003.¹⁷

Of the locations within the Plan Area that were assessed (a total of 9), one had 1 inch of silt, one had 0.5 inches of silt, and the rest had no silt accumulation, as observed by the City in 2004. This data indicates the reduction in capacity due to debris accumulation has a relatively minimal impact to the performance of the storm drain system in the Plan Area. The Storm Drainage Master Plan identifies a Capital Improvements Project within the Plan Area to increase the capacity of storm drains in order to alleviate hydraulic grade line issues, and to identify critical maintenance and improvement projects that will reduce potentially costly flooding. The Storm Drainage Master Plan proposes upsizing an existing 30-inch storm drain to 48 inches that would need to tie-in with an existing hydrodynamic separator unit at the downstream reach prior to connecting to the culverted portion of Gen Echo Creek at 27th Street.

The Storm Drainage Master Plan is recommended to be updated as a tool for guiding investment in the City's storm drainage system in Resilient Oakland.¹⁸ Storm drain systems in most development areas are aged and would not be able to handle increased surface runoffs. Future storm drainage improvements within the city of Oakland would need to adhere to the 2014 Oakland Storm Drainage Design Standards.¹⁹

c. Water Services

The Plan Area is served by existing water supplies, treatment facilities, and distribution systems, which are operated and managed by the East Bay Municipal Utility District (EBMUD) as described below. The information presented in this section is based on the EBMUD Urban Water Management Plan²⁰ and the Water Supply Assessment prepared for the Specific Plan (included as Appendix E).

EBMUD's current Urban Water Management Plan (UWMP) is five years old and is not used to describe the existing water supply or demand in this document. EBMUD is currently preparing its 2020 UWMP, which is scheduled for submission to the Department of Water Resources by summer of 2021.

¹⁷ City of Oakland, 2006. Final Report, City of Oakland Storm Drainage Master Plan, Volume 1 of 3, March 2006. Prepared by CH2MHill.

¹⁸ City of Oakland, 2016. Resilient Oakland. Available at: https://www.100resilientcities.org/wp-content/uploads/2017/07/Resilient-Oakland_11-22_web.pdf, accessed on March 15, 2019.

¹⁹ City of Oakland, 2014. Bureau of Engineering and Construction, Storm Drainage Design Standards. Available at: <https://www.oaklandca.gov/resources/storm-drainage-design-standards>, accessed January 9, 2019.

²⁰ East Bay Municipal Utility District (EBMUD), 2015. Urban Water Management Plan 2015. Water Resources Planning Division, accessed January 10, 2019.

(1) Water Supply

EBMUD provides potable water to approximately 1.4 million people throughout portions of Alameda and Contra Costa counties, including the city of Oakland. EBMUD obtains approximately 90 percent of its water from the Mokelumne River watershed and transports it through pipe aqueducts to temporary storage reservoirs in the East Bay hills.²¹

EBMUD has water rights and facilities to divert up to a daily maximum of 325 million gallons per day (mgd).²² However, this allocation may be constrained by several factors—including upstream water use by prior water right holders; downstream water use and other downstream obligations, including protection of public trust resources; drought, or less-than-normal rainfall for more than a year; and emergency outage.

In 2015, the average daily water demand within the EBMUD service area was 190 mgd. This demand is adjusted for conservation and recycled water program savings. Demand is projected to increase to 217 mgd in 2020 and to 230 mgd by 2040. The historical water use in the Plan Area is approximately 2.58 mgd. Despite EBMUD's aggressive conservation and water recycling programs, Mokelumne River and the local watershed supply are not enough to meet the projected 2040 customer demands during multi-year droughts without achieving potentially significant water use reductions.²³

To meet projected water needs and address deficient supply during severe droughts, EBMUD is working to identify supplemental water supplies and recycled water programs. New water supplies will come from water transfers, groundwater storage, and regional supply projects. In dry years, EBMUD may use Sacramento River water (up to 100 mgd) via the Freeport Regional Water Facility, located south of Sacramento on the Sacramento River.²⁴

In addition, recycled water treatment facilities have been constructed at EBMUD's wastewater treatment plant, located at the foot of the San Francisco-Oakland Bay Bridge. EBMUD stores the recycled water in a 1.5-million-gallon storage tank at the wastewater treatment plant, and uses another 2.4 mgd at the plant for various industrial processes as well as landscape irrigation.²⁵ One of the programs under this policy is the East Bayshore Recycled Water Project, which supplies

²¹ East Bay Municipal Utility District (EBMUD), 2017. About Your Water. Available at: <https://www.ebmud.com/water/about-your-water/>, accessed January 10, 2019.

²² Ibid.

²³ East Bay Municipal Utility District (EBMUD), 2015. Urban Water Management Plan 2015. Water Resources Planning Division, accessed January 10, 2019.

²⁴ East Bay Municipal Utility District (EBMUD), 2017. About Your Water. Available at: <http://www.ebmud.com/water/about-your-water/>, accessed February 26, 2019.

²⁵ East Bay Municipal Utility District (EBMUD), 2015. East Bayshore Recycled Water Project. Available at: https://www.ebmud.com/files/9415/3437/5219/EBRWP_Fact_Sheet__Map-August_2018.pdf, accessed March 13, 2019.

recycled water for landscape irrigation in areas of Oakland and Emeryville where recycled water pipelines have been installed.

EBMUD policy 9.05 requires that customers use non-potable water for nondomestic purposes when it is of adequate quality and quantity, not detrimental to public health, and not injurious to plant or animal life, to offset demand on EBMUD's limited potable water supply. Feasible recycled water uses may include, but are not limited to, landscape irrigation, commercial and industrial process use, and toilet and urinal flushing in non-residential use.²⁶

(2) Water Treatment Facilities

There are six water treatment plants in the EBMUD water supply and distribution system. These plants combined have a treatment capacity of over 375 mgd. The Orinda Water Treatment Plant, which serves Oakland and the Plan Area, has the largest output with a maximum capacity of 200 mgd.²⁷ Beginning in 2016, the Orinda Water Treatment Plant underwent necessary maintenance and process upgrades to improve the reliability of its operations.²⁸ All water delivered to customers is filtered through sand and anthracite, or carbon treatment, with plants providing disinfection, fluoridation, and corrosion control.

(3) Water Distribution Systems

From the water treatment plants, water is distributed throughout EBMUD's service area, which is divided into more than 120 pressure zones ranging in elevation from sea level to 1,450 feet. Approximately 50 percent of treated water is distributed to customers purely by gravity. The EBMUD water distribution network includes 4,200 miles of pipe, 125 pumping plants, and 165 water distribution reservoirs (tanks storing treated drinking water), generating a total capacity of 830 million gallons.²⁹

The Plan Area is located within EBMUD's Central Pressure Zone, which provides water service to customers within an elevation range of 0–100 feet.³⁰ Water pressure is generally adequate throughout the City, but pressure may be reduced in some locations with older water mains if

²⁶ David Rehnstrom, 2019. East Bay Municipal Utility District (EBMUD) comment letter response to Notice of Preparation of a Draft Environmental Impact Report for the Downtown Oakland Specific Plan.

²⁷ East Bay Municipal Utility District (EBMUD), 2018. Water Treatment. Available at: <https://www.ebmud.com/water/about-your-water/water-quality/water-treatment/>, accessed January 10, 2019.

²⁸ East Bay Municipal Utility District (EBMUD), 2017. Orinda Treatment Plant Maintenance Projects. Available at: <http://www.ebmud.com/about-us/construction-my-neighborhood/orinda-treatment-plant-maintenance-projects/>, accessed February 26, 2019.

²⁹ East Bay Municipal Utility District (EBMUD), 2015. Urban Water Management Plan 2015. Water Resources Planning Division, accessed January 10, 2019.

³⁰ David Rehnstrom, 2019. East Bay Municipal Utility District (EBMUD) comment letter response to Notice of Preparation of a Draft Environmental Impact Report for the Downtown Oakland Specific Plan.

they are not sized based on current standards or have lost capacity due to deterioration. EBMUD owns and operates distribution pipelines under all the streets within the Plan Area and its vicinity. Typically, required pipeline relocations and extensions, in addition to other water distribution infrastructure improvements, are made at the expense of the project applicant in consultation with EBMUD's business office.

d. Solid Waste and Recycling

Municipal solid waste collection and disposal in Alameda County is a local government responsibility shared among fourteen cities and two sanitary districts.³¹ Non-hazardous solid waste and green waste (e.g., yard trimmings) in the city of Oakland are collected by Waste Management of Alameda County while recycling services are provided by California Waste Solutions. There are presently two operating landfills in Alameda County: Altamont Landfill and Vasco Road Landfill.³²

Waste Management of Alameda County provides waste collection services for residential, commercial, and industrial customers, as well as public facilities (parks and public buildings). These waste materials are taken to the Davis Street Resource and Recovery Complex in San Leandro for processing, and then hauled to the Altamont Landfill and Resource Facility near the city of Livermore. As of 2017, the Davis Street transfer facility has a permitted maximum daily throughput of 5,600 tons.³³ The Altamont Landfill facility is approximately 2,170 acres (472 acres of permitted landfill area) and has a permitted maximum daily disposal of 11,150 tons per day. The Altamont Landfill is projected to have enough capacity to operate until 2037 (its expected closure date).³⁴ Vasco Road Landfill has a permitted maximum daily throughput of 2,518 tons per day but has an expected closure date of 2022.³⁵

In 2017, the City of Oakland disposed of approximately 349,408 tons (4.4 pounds per day per person, 9.6 pounds per day per employee) of solid waste at various disposal facilities, thereby well within the recommended daily per-capita targets of 5.8 pounds per day per person, 15.3

³¹ Alameda County Waste Management Authority (ACWMA), 2003. Alameda County Integrated Waste Management Plan. Amended March 2017. Available at: <http://www.stopwaste.org/sites/default/files/ColWMP%20update%202017%20Final%201.pdf>, accessed February 25, 2019.

³² Ibid.

³³ California Department of Resources Recycling and Recovery (CalRecycle), 2019. Solid Waste Information System facility/site search. Available at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/01-AA-0007/>, accessed February 26, 2019.

³⁴ Alameda County Waste Management Authority (ACWMA), 2003. Alameda County Integrated Waste Management Plan. Amended March 2017. Available at: <http://www.stopwaste.org/sites/default/files/ColWMP%20update%202017%20Final%201.pdf>, accessed January 10, 2019.

³⁵ California Department of Resources Recycling and Recovery (CalRecycle), 2019. Solid Waste Information System facility/site search. Available at: <https://www2.calrecycle.ca.gov/swfacilities/Directory/01-AA-0010/>, accessed February 26, 2019.

pounds per day per employee, established by the California Department of Resources Recycling and Recovery (CalRecycle).^{36,37}

In anticipation of future waste diversion and landfill needs exceeding the capacities of existing facilities, Alameda County Waste Management Authority adopted a Program EIR for landfill acquisition of an 86-square mile area in the Altamont Hills (Altamont Hills Landfill Acquisition EIR) in 1989.³⁸ Alameda County Waste Management Authority also approved a conceptual plan and EIR for a potential integrated waste management facility in 1994. The Alameda County Waste Management Authority has continued to hold the integrated waste management facility landfill site property as a potential reserve for waste diversion facilities and a landfill.

To address trash impairment, the City of Oakland prepared a Long-Term Trash Load Reduction Plan and Assessment Strategy (Long-Term Plan)³⁹ and submitted it to the Regional Water Board in compliance with Provision C.10.c of the MRP. The Long-Term Plan is consistent with the Long-Term Trash Load Reduction Framework developed in collaboration with Water Board staff. The Long-Term Plan includes specific provisions to address trash problems in the Downtown Oakland area where the combination of transit hubs, high pedestrian traffic, and high-density land uses results in an elevated trash problem. Specifically, the Long-Term Plan calls for evaluation of pilot activities including trash containment, cigarette butt receptacles, installation of automatic retractable screens, and full capture installation. Much of the downtown area, including the Plan Area, is swept three times per week. Based on the street sweeping evaluation and recommendations, the Plan Area may be recommended for operation modifications that provide increased efficiency and/or possible installation of automatic screens in key locations.

e. Electricity and Natural Gas

Pacific Gas and Electric Company (PG&E) provides electricity and natural gas service to the city of Oakland, including the Plan Area. PG&E charges connection and user fees for all new development, in addition to sliding rates for electrical and natural gas service based on use. Throughout most of Oakland, electrical power is delivered via overhead distribution and transmission lines, and natural gas is distributed through underground pipes. In 2017, Alameda

³⁶ California Department of Resources Recycling and Recovery (CalRecycle), 2017. Countywide, Regionwide, and Statewide Jurisdiction Diversion/Disposal Progress Report. Available at: <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionDetail?year=2017&jurisdictionID=345>, accessed January 10, 2019.

³⁷ CalRecycle was formerly known as the California Integrated Waste Management Board.

³⁸ Alameda County Waste Management Authority (ACWMA), 2003. Alameda County Integrated Waste Management Plan. Amended March 2017. Available at: <http://www.stopwaste.org/sites/default/files/ColWMP%20update%202017%20Final%201.pdf>, accessed January 10, 2019.

³⁹ City of Oakland, 2014. Long-Term Trash Reduction Plan and Progress Assessment Strategy, February 1.

County consumed a total of approximately 11,113 gigawatt-hours in residential and non-residential use.⁴⁰

Gas supplies in Northern California come primarily from gas fields in the Sacramento Valley.⁴¹ The PG&E gas transmission pipeline system serves approximately 4.2 million residential customers and over 200,000 commercial and industrial customers in Northern and Central California.⁴² However, PG&E produces much of its energy from renewable sources and has plans in place to increase reliance on renewable energy sources. Of the energy provided to PG&E customers in 2017, approximately 33 percent came from renewable resources, and nuclear generation (27 percent), natural gas (20 percent), large hydroelectric facilities (18 percent), and unspecified sources (2 percent) made up the rest.⁴³ Because many agencies in California have adopted policies seeking increased use of renewable resources (and have established minimum standards for the provision of energy generated by renewable resources), PG&E is expected to continue to meet future demand for energy via an increasing reliance on renewable resources, including small-scale sources such as photovoltaic panels and wind turbines, in addition to larger-scale facilities such as wind farms.

Regulatory requirements for efficient use of electricity and gas are contained in Title 24, Part 6, of the California Code of Regulations, entitled "Energy Efficiency Standards for Residential and Nonresidential Buildings." These regulations specify the State's minimum energy efficiency standards and apply to new construction of both residential and nonresidential buildings. The standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Compliance with these standards is verified and enforced through the local building permit process.

⁴⁰ California Energy Commission (CEC), 2018. Electricity Consumption by County. Available at: <https://ecdms.energy.ca.gov/electbycounty.aspx>, accessed February 26, 2019.

⁴¹ California Gas and Electric Utilities, 2018. 2018 California Gas Report. Available at: https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf, accessed February 26, 2019.

⁴² Pacific Gas and Electric Company (PG&E). PG&E Overview. Available at: http://www.pgecorp.com/corp_responsibility/reports/2015/buo1_pge_overview.jsp, accessed February 26, 2019.

⁴³ Pacific Gas and Electric Company (PG&E), 2018. Exploring Clean Energy Solutions. Available at: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page, accessed February 26, 2019.

2. Regulatory Setting

The following describes the State and local regulatory setting as it relates to utilities and service systems.

a. Federal

(1) Clean Water Act

The Clean Water Act established the basic structure for regulating discharges of pollutants into the waters of the U.S. and gave the U.S. Environmental Protection Agency the authority to implement pollution control programs, such as setting wastewater standards for industry. The Clean Water Act sets water quality standards for all contaminants in surface waters. The statute employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. The Army Corps of Engineers has jurisdiction over all waters of the U.S. including, but not limited to, perennial and intermittent streams, lakes, and ponds, as well as wetlands in marshes, wet meadows, and side hill seeps. Under Section 401 of the Clean Water Act, every applicant for a federal permit or license for any activity which may result in a discharge to a water body must obtain State Water Quality Certification that the proposed activity will comply with State water quality standards.

(2) National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program under the Clean Water Act controls water pollution by regulating point and non-point sources that discharge pollutants into "waters of the U.S." California has an approved State NPDES program. The U.S. Environmental Protection Agency has delegated authority for NPDES permitting to the California SWRCB, which has nine regional boards. The RWQCB regulates water quality in the Plan Area.

b. State

The following State regulations apply to water supply and conservation, solid waste disposal, and medical waste management, all of which are applicable to the Specific Plan and any future projects under the development program.

(1) Water Conservation in Landscaping Act (AB 1881, AB 2006)

The Water Conservation in Landscaping Act of 2006 (Assembly Bill [AB] 1881, Laird) requires cities, counties, and charter cities and charter counties to adopt landscape water conservation ordinances by January 1, 2010. Pursuant to this law, the Department of Water Resources has prepared a Model Water Efficient Landscape Ordinance for use by local agencies. Most new and

rehabilitated landscapes are subject to a water efficient landscape ordinance. Public landscapes and private development projects, including developer-installed single-family and multi-family residential landscapes with at least 2,500 square feet of landscape area, are subject to the model water ordinance. Homeowner-provided landscaping at single-family and multi-family homes is subject to the ordinance if the landscape area is at least 5,000 square feet. However, the ordinance does not apply to registered local, State, or federal historic sites; ecological restoration projects; mined-land reclamation projects; or plant collections.

(2) Water Supply Consultation

Sections 10910 to 10915 of the California Public Resources Code require local water providers to conduct a water supply assessment for projects proposing over 500 housing units, 250,000 square feet of commercial office space (or more than 1,000 employees), a shopping center or business establishment with over 500,000 square feet (or more than 1,000 employees), or equivalent usage. Local water suppliers must also prepare (or have already prepared) an urban water management plan to guide planning and development in the water supplier's service area, and specifically to pursue efficient use of water resources. Issuance of a water supply assessment determination by the local water supplier for a proposed project verifies that the supplier has previously considered a project in its plan, and has adequate capacity to serve a project in addition to its existing service commitments (or, alternatively, measures that would be required to adequately serve the proposed project).

(3) California Integrated Waste Management Act

In 1989, the California Legislature enacted the California Integrated Waste Management Act, which requires the diversion of waste materials from landfills in order to preserve landfill capacity and natural resources. Cities and counties in California were required to divert 25 percent of solid waste by 1995 and 50 percent of solid waste by 2000. The City of Oakland met this requirement by diverting 52 percent of its waste in 2000.⁴⁴ This Act further requires every city and county to prepare two documents demonstrating how the mandated rates of diversion will be achieved. The Source Reduction and Recycling Element must describe the chief source of the jurisdiction's waste, the existing diversion programs, and current rates of waste diversion and new or expanded diversion programs. The Household Hazardous Waste Element must describe each jurisdiction's responsibility in ensuring that household hazardous wastes are not mixed with nonhazardous solid wastes and subsequently deposited at a landfill. Oakland's Source Reduction and Recycling Element and Household Hazardous Waste Element were approved in 1995 by CalRecycle.

⁴⁴ California Department of Resources Recycling and Recovery (CalRecycle), 2016. Jurisdiction Diversion/Disposal Rate Summary (1995 - 2006). Available at: www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversion.aspx, accessed February 4, 2019.

(4) California Solid Waste Reuse and Recycling Access Act of 1991

Public Resources Code Sections 42900–42901, also known as the California Solid Waste Reuse and Recycling Access Act, are part of the California Integrated Waste Management Act. In addition to the solid waste diversion requirements of AB 939, this legislation required the California Integrated Waste Management Board, on or before March 1, 1993, to adopt a model ordinance for adoption by a local agency relating to adequate areas for collecting and loading recyclable materials in development projects. A local agency is required to adopt and enforce that model ordinance if it did not adopt an ordinance providing for collection and loading by September 1, 1994. In 2010, the California Integrated Waste Management Board was replaced by CalRecycle.

(5) California Code of Regulations, Title 23: California Model Water Efficient Landscape Ordinance

Title 23, California’s Model Water Efficient Landscape Ordinance, requires new construction and rehabilitated landscape project applicants to submit a Landscape Documentation Package to the local agency or designated agency, such as EBMUD, for approval. The Landscape Documentation Package includes project and water supply information, and a Water Efficient Landscape Worksheet.⁴⁵

(6) California Code of Regulations, Title 24, Part 11: California Building Standards (CALGreen)

CALGreen is a Statewide regulatory code for all residential, commercial, hospital, and school buildings. The regulations are 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. Title 24 standards require all new residential and nonresidential development to comply with several energy conservation standards through the implementation of various energy conservation measures—including ceiling, wall, and concrete slab insulation; vapor barriers; weather stripping on doors and windows; closeable doors on fireplaces; insulated heating and cooling ducts; water heater insulation blankets; and certified energy-efficient appliances. CALGreen became mandatory on January 1, 2011, for new residential and commercial construction. Please refer to the regulatory framework subsection of Section V.D, *Greenhouse Gas Emissions*, for a detailed discussion of AB 32, and other energy-related State regulations.

⁴⁵ California Code of Regulations (CCR), Title 23, Section 490 – 495.

c. Regional

(1) San Francisco Bay Regional Water Quality Control Board (RWQCB)

The RWQCB governs many of the regulations associated with utilities, specifically potable water, sanitary sewers, storm drains, and recycled water. RWQCB has the authority to enforce water quality regulations found in the Clean Water Act based on the Porter-Cologne Water Quality Control Act. Wastewater discharges are guided by the NPDES permits granted by the RWQCB. The City's storm drain outfalls operate under the NPDES permits granted by the RWQCB.

(2) Alameda County Clean Water Program

The Alameda Countywide Clean Water Program consists of 17 member agencies, including the City of Oakland and the Alameda County Flood and Water Conservation District, that work together to protect creeks, wetlands, and the San Francisco Bay. The member agencies have developed performance standards to clarify the requirements of the stormwater pollution prevention program, adopted stormwater management ordinances, conducted extensive education and training programs, and reduced stormwater pollutants from industrial areas and construction sites.

The Alameda Countywide Clean Water Program is part of the Municipal Regional Stormwater National Pollutant Discharge Elimination Permit that was adopted by the RWQCB on October 14, 2009. The National Pollutant Discharge Elimination permit (Order R2-2009-0074 Permit No. CAS612008) issued by the RWQCB is designed to enable the Alameda County Clean Water Program agencies to meet federal Clean Water Act requirements. The permit includes performance standards for new development and construction activities also referred to as Provision C.3 requirements. The C.3 requirements include measures for stormwater treatment in new development and redevelopment projects to address stormwater runoff pollutant discharges. An additional goal is to prevent increases in runoff flows primarily accomplished through implementation of low impact development (LID) techniques. The C.3 provision also requires preparation of a hydrograph modification management plan in cases where the changes in the amount and timing of runoff would increase stormwater discharge rates and/or duration and increase the potential for erosion or other significant adverse impacts to beneficial uses.

(3) Regional Private Sewer Lateral Ordinance

In 2009, the U.S Environmental Protection Agency and the California Regional Water Quality Control Board ordered the EBMUD, six East Bay cities, and one sewer district to fix old, cracked sanitary sewer pipes. Many of these pipes needed repair to prevent infiltration of rainwater, which can overwhelm wastewater pipes and treatment facilities and cause partially treated

wastewater to be released into the Bay. EBMUD and its partners have been required to have a Regional Private Sewer Lateral Ordinance beginning in 2011,⁴⁶ in order to meet the requirements of its NPDES waste discharge permit and federal consent decree. EBMUD passed this ordinance to reduce I/I in the system. The ordinance requires private lateral sewer owners to comply with the replacement and testing requirements to eliminate I/I from older sewer laterals. For new or redevelopment, the ordinance requires the installation and testing of sewer laterals to document that no I/I is entering the wastewater flows.

(4) EBMUD Drought Management Plan

If water supplies are severely depleted, EBMUD's Board of Directors may declare a water shortage emergency and implement the Drought Management Plan (DMP), which is designed to allow EBMUD to minimize drought impacts on its customers while continuing to meet stream flow release requirements and obligations to downstream Mokelumne River water uses. The Board may also implement the DMP in the absence of a declaration of water shortage emergency if the supplies are moderately depleted or the State mandates water use restrictions. The DMP guided EBMUD in successfully managing water demand during mandatory and voluntary rationing periods in calendar years 1967-1978, 1987-1994, 2007-2010, and 2014-2015 when supplies were limited.

The DMP guidelines offer two scenarios depending on whether the drought declaration is linked to local conditions, as measured by total system storage (TSS), or to a state mandate, such as the mandatory water use reductions set by the State Water Board in 2015. Historically, EBMUD's drought declarations have been based on local conditions. Under the "TSS Scenario," EBMUD declares different drought stages based on projected end-of-September TSS volumes. Stage zero corresponds to normal water year conditions, and Stages one through four reflect increasingly severe drought conditions corresponding to reduced TSS.

(5) EBMUD Urban Water Management Plan

EBMUD is required by the California Water Code to update and adopt an Urban Water Management Plan and submit a completed plan to the Department of Water Resources every five years. The Urban Water Management Plan (UWMP) provides an assessment of EBMUD's water supply and demand, an overview of the recycled water and conservation programs, compliance with the Water Conservation Act of 2009, and EBMUD's Water Shortage Contingency Plan. The UWMP is part of the EBMUD's long-term planning to ensure water supply reliability for EBMUD

⁴⁶ East Bay Regional Private Sewer Lateral Program. Available at: <http://www.eastbaypsl.com/eastbaypsl/>, accessed July 11, 2019.

customers, especially during drought periods. The EBMUD Board of Directors adopted the final UWMP and Water Shortage Contingency on June 28, 2016.⁴⁷

d. City of Oakland

(1) General Plan

The Oakland General Plan Land Use and Transportation Element (LUTE) contains the following policies that are relevant to the Plan Area:

Policy N.12.4: Electrical, telephone, and related distribution lines should be underground in commercial and residential areas, except where special local conditions such as limited visibility of the poles and wires make this unneeded. They should also be underground in appropriate institutional, industrial, and other areas, and generally along freeways, scenic routes, and heavily traveled streets. Programs should lead systematically toward the eventual undergrounding of all existing lines in such places. Where significant utility extensions are taking place in these areas, such as in new subdivisions, utilities should be installed underground at the start.

Policy N.12.5: In its capital improvement and public service programs, the City should give priority to reducing deficiencies in, and disparities between, existing residential areas.

Relevant Open Space, Conservation and Recreation (OSCAR) Element Planning Strategies for the Plan Area are as follows:

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

Policy CO-4.3: Promote the use of reclaimed wastewater for irrigating landscape medians, cemeteries, parks, golf courses, and other areas requiring large volumes of non-potable water.

Policy CO-13.1: Promote a reliable local energy network which meets future needs and long-term economic development objectives at the lowest practical cost.

Policy CO-13.3: Encourage the use of energy-efficient construction and building materials. Encourage site plans for new development which maximize energy efficiency.

Policy CO-13.4: 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.

⁴⁷ East Bay Municipal Utility District (EBMUD), 2015. Urban Water Management Plan 2015. Water Resources Planning Division.

(2) Zero Waste Strategic Plan

In March 2006, the City of Oakland adopted a zero-waste goal by 2020, and passed a resolution adopting the Zero Waste Strategic Plan in December 2006. The main strategies outlined in the plan include (1) expand and improve local and regional recycling and composting; (2) develop and adopt new rules and incentives to reduce waste disposal; (3) preserve land for sustainable development and green industry infrastructure; (4) advocate for manufacturer responsibility for produce waste, ban problem materials; and (5) educate, promote, and advocate a zero waste sustainability agenda.⁴⁸

(3) Construction and Demolition Debris Waste Reduction and Recycling Requirements

The City of Oakland's construction and demolition debris waste reduction and recycling requirements (Municipal Code Chapter 15.34) are intended to further the goals of AB 939. They require a project applicant to prepare and submit a Construction and Demolition Debris Waste Reduction and Recycling Plan to divert at least 50 percent of all construction and demolition debris generated by project construction from landfill disposal. The Construction and Demolition Debris Waste Reduction and Recycling Plan is required to document the ways in which the applicant will reduce the quantity of construction and demolition debris disposed of at landfills by 50 percent or more. The City will not approve a building permit for a project until the plan is approved.

(4) Standard Conditions of Approval

The City's SCAs relevant to utilities are listed below. The SCAs are adopted as requirements for all projects approved within Oakland.

SCA-UTL-1: Compliance with Other Requirements (#3)

The project applicant shall comply with all other applicable federal, state, regional, and local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Bureau of Building, Fire Marshal, Department of Transportation, and Public Works Department. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in SCA #4: Minor and Major Changes.

SCA-UTL-2: Construction Management Plan (#13)

Prior to the issuance of the first construction-related permit, the project applicant and his/her general contractor shall submit a Construction Management Plan for review and approval by the Bureau of Planning, Bureau of Building, and other relevant City departments such as the Fire Department,

⁴⁸ City of Oakland, 2017. Zero Waste. Available at: <http://www2.oaklandnet.com/Government/o/PWA/o/FE/s/IDR/o/ZW/index.htm>, accessed February 6, 2019.

Department of Transportation, and the Public Works Department as directed. The Construction Management Plan shall contain measures to minimize potential construction impacts including measures to comply with all construction-related Conditions of Approval (and mitigation measures if applicable) such as dust control, construction emissions, hazardous materials, construction days/hours, construction traffic control, waste reduction and recycling, stormwater pollution prevention, noise control, complaint management, and cultural resource management (see applicable Conditions below). The Construction Management Plan shall provide project-specific information including descriptive procedures, approval documentation, and drawings (such as a site logistics plan, fire safety plan, construction phasing plan, proposed truck routes, traffic control plan, complaint management plan, construction worker parking plan, and litter/debris clean-up plan) that specify how potential construction impacts will be minimized and how each construction-related requirement will be satisfied throughout construction of the project.

SCA-UTL-3: Erosion and Sedimentation Control Plan for Construction (#49)

a. Erosion and Sedimentation Control Plan Required

Requirement: The project applicant shall submit an Erosion and Sedimentation Control Plan to the City for review and approval. The Erosion and Sedimentation Control Plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading and/or construction operations. The Plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the City. The Plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

b. Erosion and Sedimentation Control During Construction

Requirement: The project applicant shall implement the approved Erosion and Sedimentation Control Plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Bureau of Building.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-UTL-4: State Construction General Permit (#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.

When Required: Prior to approval of construction-related permit

Initial Approval: State Water Resources Control Board; evidence of compliance submitted to Bureau of Building

Monitoring/Inspection: State Water Resources Control Board

SCA-UTL-5: Site Design Measures to Reduce Stormwater Runoff (#52)

Requirement: Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate site design measures into the project to reduce the amount of stormwater runoff. These measures may include, but are not limited to, the following:

- a. Minimize impervious surfaces, especially directly connected impervious surfaces and surface
- b. parking areas;
- c. Utilize permeable paving in place of impervious paving where appropriate;
- d. Cluster structures;
- e. Direct roof runoff to vegetated areas;
- f. Preserve quality open space; and
- g. Establish vegetated buffer areas.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A

SCA-UTL-6: Source Control Measures to Limit Stormwater Pollution (#53)

Requirement: Pursuant to Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES), the project applicant is encouraged to incorporate appropriate source control measures to limit pollution in stormwater runoff. These measures may include, but are not limited to, the following:

- a. Stencil storm drain inlets "No Dumping – Drains to Bay;"
- b. Minimize the use of pesticides and fertilizers;
- c. Cover outdoor material storage areas, loading docks, repair/maintenance bays and fueling areas;
- d. Cover trash, food waste, and compactor enclosures; and
- e. Plumb the following discharges to the sanitary sewer system, subject to City approval:
- f. Discharges from indoor floor mats, equipment, hood filter, wash racks, and, covered outdoor wash racks for restaurants;
- g. Dumpster drips from covered trash, food waste, and compactor enclosures;
- h. Discharges from outdoor covered wash areas for vehicles, equipment, and accessories;
- i. Swimming pool water, if discharge to on-site vegetated areas is not feasible; and
- j. Fire sprinkler test water, if discharge to on-site vegetated areas is not feasible.

When Required: Ongoing

Initial Approval: N/A

Monitoring/Inspection: N/A

SCA-UTL-7: Construction and Demolition Waste Reduction and Recycling (#84)

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 for City review and approval and shall implement the approved Waste Reduction and Recycling Plan. 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 Waste Reduction and Recycling Plan 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 Waste Reduction and Recycling Plan 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Environmental Services Division

Monitoring/Inspection: Public Works Department, Environmental Services Division

SCA-UTL-8: Underground Utilities (#85)

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-UTL-9: Recycling Collection and Storage Space (#86)

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-UTL-10: Green Building Requirements (#87)***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.
 - All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable Hardship Exemption granted during the review of the Planning and Zoning permit.
 - The point level certification requirement is 53 points for residential and LEED Gold (mid-60 points minus cool roof requirements) for non-residential 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to Final Approval

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-UTL-11: Green Building Requirements: Small Projects (#88)

Applicable To: All projects involving any of the following and are rated using the Small Commercial or Bay Friendly Basic Landscape Checklists:

- a. New Construction of Non-Residential Buildings between 5,000 and 25,000 sq. ft. of total floor area;
- b. Additions/Alterations 5,000 and 25,000 sq. ft. of total floor area to a Non-Residential Building;
- c. Additions/Alterations (not meeting the Major Alteration Definition) over 25,000 sq. ft. of total floor area to a Non-Residential Building;
- d. Additions/Alterations 5,000 and 25,000 sq. ft. of total floor area to a Historic Non-Residential Building;
- e. Additions/Alterations (not meeting the Major Alteration Definition) over 25,000 sq. ft. of total floor area to a Historic Non-Residential Building; or
- f. Construction projects with over 25,000 sq. ft. of total floor area of new construction requiring a landscape plan.]

a. Compliance with Green Building Requirements During Plan-Check

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) for projects using the StopWaste.Org Small Commercial Checklist or Bay Friendly Basic Landscape Checklist].

- i. The following information shall be submitted to the City for review and approval with 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 green building checklist approved during the review of a 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 (b) below.
 - Other documentation to prove compliance.

- ii. The set of plans in subsection (a) shall demonstrate compliance with the following:
- CALGreen mandatory measures.
 - All applicable green building measures identified on the checklist approved during the review of a Planning and Zoning permit, or submittal of a Request for Revision Plan-check application that shows the previously approved points that will be eliminated or substituted.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

b. Compliance with Green Building Requirements During Construction

Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Green Building Ordinance during construction.

The following information shall be submitted to the City for review and approval:

- i. Completed copy of the green building checklists approved during review of the Planning and Zoning permit and during the review of the Building permit.
- ii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-UTL-12: Sanitary Sewer System (#89)

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Bureau of Design and Construction, Department of Engineering and Construction

Monitoring/Inspection: N/A

SCA-UTL-13: Storm Drain System (#90)

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-UTIL-14: Recycled Water (#91)

Requirement: Pursuant to Section 16.08.030 of the Oakland Municipal Code, the project applicant shall provide for the use of recycled water in the project for landscape irrigation purposes unless the City determines that there is a higher and better use for the recycled water, the use of recycled water is not economically justified for the project, or the use of recycled water is not financially or technically feasible for the project. The project applicant shall contact the New Business Office of the East Bay Municipal Utility District (EBMUD) for a recycled water feasibility assessment by the Office of Water Recycling. If recycled water is to be provided in the project, the project drawings submitted for construction-related permits shall include the proposed recycled water system and the project applicant shall install the recycled water system during construction.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning; Bureau of Building

Monitoring/Inspection: Bureau of Building

SCA-UTL-15: Water Efficient Landscape Ordinance (WELO) (#92)

Requirement: The project applicant shall comply with California's Water Efficient Landscape Ordinance (WELO) in order to reduce landscape water usage. For any landscape project with an aggregate (total noncontiguous) landscape area equal to 2,500 sq. ft. or less. The project applicant may implement either the Prescriptive Measures or the Performance Measures, of, and in accordance with the California's Model Water Efficient Landscape Ordinance. For any landscape project with an aggregate (total noncontiguous) landscape area over 2,500 sq. ft., the project applicant shall implement the Performance Measures in accordance with the WELO.

Prescriptive Measures: Prior to construction, the project applicant shall submit documentation showing compliance with Appendix D of California's Model Water Efficient Landscape Ordinance (see website below starting on page 23): <http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%202023%20extract%20-%20Official%20CCR%20pages.pdf>

Performance Measures: Prior to construction, the project applicant shall prepare and submit a Landscape Documentation Package for review and approval, which includes the following:

- a. Project Information:
 - i. Date,
 - ii. Applicant and property owner name,
 - iii. Project address,
 - iv. Total landscape area,
 - v. Project type (new, rehabilitated, cemetery, or homeowner installed),
 - vi. Water supply type and water purveyor,
 - vii. Checklist of documents in the package, and
 - viii. Applicant signature and date with the statement: "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package."
- b. Water Efficient Landscape Worksheet
 - i. Hydrozone Information Table
 - ii. Water Budget Calculations with Maximum Applied Water Allowance (MAWA) and Estimated Total Water Use
- c. Soil Management Report
- d. Landscape Design Plan
- e. Irrigation Design Plan, and

f. Grading Plan

Upon installation of the landscaping and irrigation systems, the Project applicant shall submit a Certificate of Completion and landscape and irrigation maintenance schedule for review and approval by the City. The Certificate of Compliance shall also be submitted to the local water purveyor and property owner or his or her designee.

For the specific requirements within the Water Efficient Landscape Worksheet, Soil Management Report, Landscape Design Plan, Irrigation Design Plan and Grading Plan, see the link below.

<http://www.water.ca.gov/wateruseefficiency/landscapeordinance/docs/Title%2023%20extract%20-%20Official%20CCR%20pages.pdf>

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

3. Impacts, Standard Conditions of Approval, and Mitigation Measures

This section describes environmental impacts related to utilities and service systems that could result from implementation of the Specific Plan and reasonably foreseeable development expected to occur under the Plan. The section begins with the criteria of significance, which establish the thresholds for determining whether an impact is significant. The latter part of this section presents the impacts associated with the Specific Plan and identifies SCAs and/or mitigation measures to address these impacts as needed.

a. Thresholds of Significance

The City of Oakland has established thresholds of significance for CEQA impacts which incorporate those in Appendix G of the CEQA Guidelines (City of Oakland, 2019). Implementation of the Specific Plan would result in a significant impact on the City's utilities and service systems 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 to serve the project from existing entitlements and resources, and require or result in a construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects; available to serve the project and reasonably foreseeable future development during multiple dry years;
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;
7. Violate applicable federal, state and local management and reduction statutes and regulations relating to energy standards; or
8. 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.

The changes to Appendix G of the State CEQA Guidelines effective in December 2018 were intended to reflect recent changes to the CEQA statutes and court decisions. Many of these recent changes and decisions are already reflected in the City's adopted significance thresholds, which have been used to determine the significance of potential impacts. To the extent that the topics or questions in Appendix G are not reflected in the City's thresholds, these topics and questions have been taken into consideration in the impact analysis below, even though the determination of significance relies on the City's thresholds.

b. Analysis and Findings

Because specific details of future individual projects within the Plan Area are not known at this time, the discussion focuses on the overall impact of the Specific Plan and the estimated changes in development and land use intensity. Population increases and land use changes resulting from development occurring under the Specific Plan were evaluated using information regarding the relevant utilities agencies and their service capabilities. Implementation of the Specific Plan would lead to less than significant impacts for all utility systems evaluated in this chapter.

The following policies from the Specific Plan would affect land use changes and encourage growth in certain areas, thereby increasing the demand on utilities and service systems. These policies were also analyzed for their overall impacts to utilities.

Policy H-1.7: Ensure that a mix of market-rate and income-restricted housing is constructed in downtown. Target creation of between 4,365 and 7,275 (aspirational target) affordable housing units including units designated to accommodate larger families out of a total housing production target of

29,100 new units. The target breakdown of new affordable units by income range, based on the City's 2015-2023 RHNA, should be: 15% extremely low-income, 15% very low-income, 30% low-income and 40% moderate income

Policy H-1.8: Study an additional development density bonus for projects that provide housing units suitable for families with children—particularly three-bedroom units.

Policy H-1.9: Encourage the development of more commercial hotels downtown to relieve pressure to convert permanent housing units and SRO hotels to short-term tourist rentals.

Policy H-1.11: As part of the updates to zoning and development incentive program, adjust the zoning in identified areas of opportunity to create new high-intensity, mixed-use neighborhoods.

Although Policy H-1.7, Policy H-1.8, Policy H-1.9, and Policy H-1.11 would encourage development and/or higher land use densities, changes in demand for these utilities and service systems 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. The impacts of these policies would not significantly affect the nature of the criteria discussion and are thus accounted for in the following impacts discussions below.

(1) Wastewater (Criteria 1 and 4)

The Specific Plan would provide for the development of up to an additional 29,100 new residential units and 20,060,000 square feet of commercial space, resulting in an estimated 52,600 new residents and 60,730 new employees in the Plan Area. The existing population in the Plan Area from 2013-2017 is approximately 19,219 (as described further in *V.L, Population and Housing*). The Plan Area's growth is aligned with Citywide growth, however, and would account for about 20 percent of Oakland's total projected population growth between 2020 and 2040.

Residential and commercial development under the Specific Plan would generate approximately 8.057 million gallons per day (mgd) of wastewater.⁴⁹ As previously mentioned, current wastewater peak flow capacity from the Municipal Waste Water Treatment Plant is 320 mgd and

⁴⁹ This rate was calculated using City of Oakland sanitary sewer generation rates of 200 gallons per day (gpd) for every two-bedroom residential unit and 100 gpd per 1000 gross square feet of commercial use. The 29,100 residential units would thus generate approximately 5,819,400 gpd or 5.8 million gallons per day (mgd). The 20,060,000 square feet of commercial space would thus generate approximately 2,060,000 gpd, or 2.1 mgd. The City of Oakland does not have specific rates for flex industrial or institutional (260,000 sf of flex industrial and 1,310,000 sf of institutional). The closest match for both flex industrial and institutional is 100 gpd per 1000 gross square feet generating approximately 157,000 gpd or 0.157 mgd.

current dry weather average annual daily flow is 54 mgd into the treatment plant, leaving approximately 265 mgd remaining capacity.⁵⁰

The 8.057 mgd generated by the Plan would represent a small incremental impact on available wastewater capacity. EBMUD reviewed the reasonably foreseeable development expected to occur in the Plan Area over the next 20 years and determined that the Main Wastewater Treatment Plant and interceptor system would have adequate dry weather capacity to accommodate and treat associated wastewater flows provided that the wastewater generated by the Plan meets the requirements of the EBMUD Wastewater Control Ordinance.⁵¹

However, wet weather flows are a concern as the East Bay Regional Wastewater Collection system experiences exceptionally high peak flows during storms due to excessive I/I that enters the system through cracks and misconnections in both public and private sewer lines. Development under the Specific Plan has the potential to exacerbate the situation. The EBMUD has historically operated three Wet Weather Facilities to provide primary treatment and disinfection for peak wet weather flows that exceed the treatment capacity of EBMUD's Main Wastewater Treatment Plant. Additionally, the seven wastewater collection system agencies that discharge to the EBMUD wastewater interceptor or Satellite Agencies, as discussed above in setting section, hold NPDES permits that prohibit them from causing or contributing to Wet-Weather Facilities discharges. These NPDES permits have removed the regulatory coverage the East Bay wastewater agencies once relied upon to manage peak wet weather flows.

On January 14, 2009, due to Environmental Protection Agency and SWRCB reinterpretation of applicable law, the RWQCB issued an order prohibiting further discharges from EBMUD's Wet Weather Facilities. In addition, on July 22, 2009, a Stipulated Order for Preliminary Relief issued by EPA, SWRCB, and RWQCB became effective. This order requires EBMUD to perform work that will identify problem infiltration/inflow areas, begin to reduce infiltration/inflow through private sewer lateral improvements, and lay the groundwork for future efforts to eliminate discharges from the Wet Weather Facilities.

Although development facilitated by the Specific Plan would increase the amount of wastewater generated within the Plan Area, these individual developments would not require or result in the construction of new wastewater treatment facilities or expansion of existing treatment facilities since the EBMUD has adequate capacity to treat this projected demand in addition to its existing commitments. Furthermore, future development would be required to adhere to SCA-UTL-12: Sanitary Sewer System (#89), as well as comply with EBMUD's Regional Private Sewer Lateral

⁵⁰ City of Oakland, 2008. Standards, Guidelines & Resources – Sanitary Sewer Design Standards. Available at: <http://www2.oaklandnet.com/government/o/PWA/o/EC/s/DGP/index.htm>, accessed February 26, 2019.

⁵¹ David Rehnstrom, 2019. East Bay Municipal Utility District (EBMUD) comment letter response to Notice of Preparation of a Draft Environmental Impact Report for the Downtown Oakland Specific Plan.

Ordinance. The EBMUD has requested that the City of Oakland require development under the Specific Plan to: 1) replace or rehabilitate any existing sanitary sewer collection systems, including sewer lateral lines, to ensure that such systems and lines are free from defects or disconnected from the sanitary sewer system, and 2) ensure that any new wastewater collection systems, including sewer lateral lines, for the project are constructed to prevent I/I to the maximum extent feasible while meeting all requirements contained in the Regional Private Sewer Lateral Ordinance and applicable municipal codes or Satellite Agency ordinances.⁵² The requirement requested by the EBMUD is consistent with the Regional Private Sewer Lateral Ordinance.

Under these standards, development projects pursuant to the Specific Plan would require an impact analysis to ensure that the existing system has enough hydraulic capacity to accommodate the development.

Wastewater generated from development and implementation of the Specific Plan would not contain any unusual pollutants and the amount of wastewater generated would be within the existing capacity of EBMUD's treatment plant, allowing EBMUD to meet the RWQCB treatment standards.

Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to wastewater treatment.

(2) Stormwater (Criterion 2)

Impact UTL-1: The City's stormwater collection system is aging and will require improvements to continue to serve the development in the downtown area that may occur in association with the Specific Plan. (S)

The Plan Area is in a highly urban and developed environment, with a large portion of impervious surface area. Development under the Specific Plan would facilitate construction that could alter the composition and amount of impervious space. Compliance with the Alameda Countywide Clean Water Program NPDES Permit would require that individual project sites result in no net increase of stormwater runoff after construction. The Specific Plan also proposes adding the "Webster Green," a linear greenway that includes both hardscape and green space, the creation of which would add additional pervious surface area within the existing drainage network.

Future development under the Specific Plan would be required by the City to evaluate the onsite and offsite condition and capacity of the existing stormwater collection system and implement

⁵² Ibid.

necessary improvements to accommodate the project, with improvement costs borne by the developer. Future projects that require new storm drain to be implemented must conform to the 2014 City of Oakland Storm Drainage Design Guidelines. Individual projects under the Specific Plan development program would also be required to implement relevant SCAs and comply with post-construction stormwater controls or LID as part of Provision C.3 of the Alameda Countywide Clean Water Program.⁵³ As explained in *Section V.J, Hydrology and Water Quality*, applicants would be subject to preparing an SCA-HYD-1: Erosion and Sedimentation Control Plan (#48) that would prevent excessive erosion and stormwater runoff of solid materials as a result of construction activities; a SCA-HYD-3: Post-Construction Stormwater Management Plan (#54a), which would ensure that stormwater management systems are appropriately designed and maintained to prevent flooding on site; and a SCA-UTL-2: Construction Management Plan (#13), which requires compliance with stormwater pollution prevention during construction. Any new storm drain to be implemented as a result of future development in the Plan Area must also conform to the 2014 City of Oakland Storm Drainage Design Guidelines SCA-UTL-13: Storm Drain System (#90). Under these requirements, drainage from individual projects would not exceed the capacity of the downstream drainage system.

In addition, the Specific Plan **Policy CH-2.4** would also require new developments to install and maintain low-impact stormwater detention systems on private property to limit the amount of runoff into drains or surface water bodies, further mitigating impacts to existing storm drainages.

Policy CH-2.4: Require new developments to install and maintain low-impact stormwater detention systems on private property to limit the amount of runoff into drains or surface water bodies including Lake Merritt, the Lake Merritt Channel, and the Oakland Estuary.

However, the City's stormwater collection system is aging and will require improvements to continue to serve the downtown area, despite the existing SCAs and Plan Policies. In addition, the City is obligated to reduce trash discharge to stormwater by 100% by July 1, 2022. The Specific Plan covers areas that generate a very high volume of trash that, if not controlled, will hinder the City's ability to meet current and future trash reduction requirements. To ensure that there is adequate stormwater infrastructure to serve downtown, and to ensure that trash discharge is reduced to stormwater, a three-part mitigation measure is proposed.

Mitigation Measure UTL-1: Part 1) The City of Oakland shall adopt a new SCA and/or revise existing SCA/s that includes the following: New development as a result of the implementation of the Specific Plan shall determine the adequacy and condition of the existing storm drainage infrastructure impacted by the project. The project watershed shall be analyzed for post-construction impacts to drainage within the watershed, accounting for

⁵³ Alameda Countywide Clean Water Program, 2017. Clean Water Program - C3 Technical Guidance Manual. Available at: <https://www.cleanwaterprogram.org/index.php/c3-guidance-table.html>, accessed February 6, 2019.

the condition of the existing infrastructure. For any identified adverse impacts, mitigation measures shall be proposed and implemented as part of the project. **Part 2)** All future projects under the Specific Plan shall require the installation of full trash capture device at priority storm drain inlets in the project area and within a 100-foot buffer around the project boundary. **Part 3)** Requires the city to update the Capital Improvement Impact fees, and or/implement a dedicated impact fee specific to stormwater to address the aging system. (LTS)

(3) Water (Criteria 3)

The analysis in this section is based on the Water Supply Assessment provided by the EBMUD on April 23, 2019, as well as a revised letter to the WSA indicating changes based on the updated development program.⁵⁴ EBMUD produces an average of 200 to 220 mgd in non-drought years. By 2040, EBMUD estimates that water demand will increase to approximately 312 mgd in its service area, however when accounting for water recycling and conservation programs the total can be reduced to 230 mgd. EBMUD also adopted a long-term Water Supply Management Program in 2011 which included growth projections of the Oakland General Plan and those that would be facilitated by the Specific Plan. The Water Supply Management Program analysis found that a combination of existing system reservoirs, conservation measures, and recycled water would meet 2040 water demand during wet and normal years.⁴⁶ Implementation of the Specific Plan would be within Citywide projected population growth between 2020 and 2040 (implementation of the Specific Plan would constitute 20 percent of Oakland's total projected population growth), and the water demand projections take into consideration densification and land use changes within commercial and residential areas. Therefore, these increases are not expected to cause any impacts on water supply within the Plan Area.

Pursuant to Sections 10910 through 10915 (SB 610) of the California Water Code, the City of Oakland requested a Water Supply Assessment from EBMUD to verify that adequate water supply is available to meet proposed demand anticipated with adoption and development under the Specific Plan. In its response to the City's request, EBMUD provided an estimated existing demand of approximately 2.58 MGD and a Specific Plan buildout of 9.7 MGD. EBMUD confirmed that the water demands for the adoption and development under the Specific Plan are accounted for in its water demand projections as published in the district's Urban Water Management Plan. The Water Supply Assessment for the Specific Plan can be found in Appendix E. The WSA produced in April 2019 with the accompanying clarifying letter in August 2019, reaffirms that water demand in the Plan Area can be met at least until 2040 with a combination of existing

⁵⁴ David Rehnstrom, 2019. East Bay Municipal Utility District (EBMUD) Water Supply Assessment for the Downtown Oakland Specific Plan, April 2019 and August 2019.

system reservoirs, construction of new water infrastructure, conservation measures, pursuing supplemental water supply sources, and recycled water.

Portions of the Plan Area fall within and around the main recycled water pipeline infrastructure of the East Bayshore Recycled Water Project as shown in Figure V.N-1. As part of its long-term water supply planning, the EBMUD will consider the feasibility of providing recycled water to the portions of the Plan Area that may feasibly be served by the main recycled water pipeline infrastructure for appropriate uses including landscape irrigation and commercial uses, as well as toilet and urinal flushing in non-residential buildings. The City will maintain continued coordination and consultation with EBMUD on the feasibility of recycled water as they plan and implement the various components of the Plan. The use of recycled water for non-domestic purposes would further offset demand generated within the Plan Area on EBMUD's potable water supply, consistent with SCA UTL-14: Recycled Water (#91) and SCA-UTL-15: Water Efficient Landscape Ordinance (WELO) (#92).

As mentioned above, EBMUD has demonstrated that water supply will be adequate to meet all future demand generated within the Plan Area. In addition, prior to approval of any future development within the Plan Area, individual projects within the Plan Area would be subject to the SCAs and the goals and policies of the City's General Plan and the Specific Plan. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to water supply.

(4) Solid Waste (Criterion 5 and 6)

Adoption and development under the Specific Plan would generate construction and demolition debris and residential and employee population increases. The Plan Area's existing population would grow with implementation of the Specific Plan from 19,219 people to 71,819 people and employment would grow from 68,665 jobs to 129,395 jobs. The construction activity and population changes associated with implementation of the Specific Plan would increase demand for solid waste and recycling services.

The Altamont Landfill is projected to have capacity through 2049 with 40 million tons of remaining capacity while the Vasco Road Landfill is expected to have capacity through 2022 with 5.6 million tons of remaining capacity.⁵⁵ The 2049 closure date of the Altamont Landfill extends past the Specific Plan's horizon of 2040. Alameda County would therefore have the capacity to process solid waste generated from implementation of the Specific Plan. These landfill capacity

⁵⁵ Alameda County Waste Management Authority (ACWMA), 2003. Alameda County Integrated Waste Management Plan. Amended March 2017. Available at: <http://www.stopwaste.org/sites/default/files/ColWMP%20update%202017%20Final%201.pdf>, accessed February 26, 2019.



- Legend**
- Downtown Oakland Specific Plan Area
 - Planned Recycled Pipeline
 - Existing Recycled Pipeline

Downtown Oakland Specific Plan EIR

Figure V.N-1
East Bayshore Recycled Water Project

projections and closure dates are conservative estimates since waste reduction rates are expected to improve over time due to education and regulations, leading to less solid waste generated per capita.⁵⁶ Additionally, the Alameda County Waste Management Authority has a policy of land acquisition for reserve landfill capacity when deemed necessary. Alameda County Waste Management Authority currently holds an 86-square mile landfill site property as a potential reserve to provide additional waste diversion and disposal capacity in anticipation of future waste diversion and landfill needs. Alameda County Waste Management Authority evaluated this potential reserve site in the 1994 Integrated Waste Management Facility Conceptual Plan and EIR.⁵⁷

Future projects under the Specific Plan development program would also be required to implement relevant SCAs. Demolition activities associated with the removal of existing structures, paved asphalt areas, and utilities would be subject to the City's Construction and Demolition Debris Waste Reduction and Recycling Requirements, which require that a project applicant submit a Waste Reduction and Recycling Plan to divert 50 percent of all construction and demolition debris. In addition, the project would be subject to the SCA-UTL-2: Construction Management Plan (#13), which requires compliance with waste reduction and recycling during construction; SCA-UTL-7: Construction and Demolition Waste Reduction and Recycling (#84); SCA-UTL-9: Recycling Collection and Storage Space (#86); and Oakland Municipal Code Chapter 15.34, which requires implementation of a Construction and Demolition Waste Reduction and Recycling Plan for construction phases. Furthermore, solid waste recycling and disposal for the Specific Plan would be contracted with the appropriate local service providers to ensure compliance with applicable regulations.

The Specific Plan would not substantially affect the remaining capacity of local landfills and would not violate any applicable solid waste standards. Therefore, impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to landfill capacity.

(5) Energy (Criterion 7 and 8)

Energy related to Criterion 7 and 8 is discussed in further detail in *Chapter VI, Effects Found Not to Be Significant*. Development under the Specific Plan would result in the creation of new residences and commercial operations and/or replace existing residential and commercial uses in the Plan Area. Energy would be consumed during the construction and operational phases of

⁵⁶ Justin Lehrner, Program Manager. Stopwaste, 2019. Personal communication with Urban Planning Partners, February 26.

⁵⁷ Alameda County Waste Management Authority (ACWMA), 2003. Alameda County Integrated Waste Management Plan. Amended March 2017. Available at: <http://www.stopwaste.org/sites/default/files/ColWMP%20update%202017%20Final%201.pdf>, accessed February 26, 2019.

future development projects under the Specific Plan. The construction phase would require energy for the manufacture and transportation of building materials, preparation of each project site, and construction of buildings and associated infrastructure. Since construction activities associated with each development project under the Specific Plan would be temporary, individually they would not result in a long-term increase in energy consumption, and would therefore not require the construction of a new electric power or natural gas facility. While development under the Specific Plan would result in an increase in the use of energy as well as an increase in the use of telecommunications, the successful implementation of the SCAs, policies, and plans discussed within *Chapter VI, Effects Found Not to be Significant*, as well as existing regulations related to building energy efficiency and vehicle fuel efficiency, would ensure that energy during construction and operation would not be wasteful and would not result in additional electric power, natural gas, or telecommunications facility.

c. Cumulative Utilities Impacts

Cumulative Impact UTL-1: The City's stormwater collection system is aging and will require improvements to continue to serve the development in the downtown area that may occur in association with the Specific Plan, and reasonably foreseeable future projects within and around the Plan Area, resulting in significant cumulative stormwater impacts. (S)

Mitigation Measure Cumulative UTL-1: Implement Mitigation Measure UTL-1. (LTS)

The Specific Plan and cumulative projects would incrementally increase the demand for utilities. Impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area, as well as cumulative impacts over the next 20 years would be less than significant related to stormwater with implementation of Mitigation Measure UTL-1.

No other cumulative impacts to these services, other than stormwater, are anticipated that would result in adverse physical impacts associated with the adoption of the Specific Plan and its associated development

Cumulative development, in combination with the Specific Plan, has and would continue to result in the development and redevelopment of infill and underutilized sites throughout the area. Infill projects in urban areas allow for the capitalization of existing utilities and service system infrastructure, therefore minimizing impacts to utility needs. The Specific Plan would not contribute to any significant adverse impacts related to water supply, wastewater, solid waste, or energy when considered together with past, present, existing, approved, pending and reasonably foreseeable development. EBMUD's projections for water and wastewater demand incorporate growth pursuant to service area-wide growth projections. As stated above, EBMUD has determined that it would meet areawide water demand in wet and normal years, as well as meet

demand during multiple dry years through a combination of conservation, recycled water, and new water supply projects. For wastewater capacity, EBMUD and the City of Oakland similarly anticipate, and plan for, cumulative development. Therefore, the effect of the Specific Plan on utilities and service systems, in combination with other foreseeable development, would not be cumulatively significant, except for stormwater.

VI. EFFECTS FOUND NOT TO BE SIGNIFICANT

This chapter contains a brief analysis of the environmental topics determined to be less than significant relevant to the Specific Plan. The following topics were excluded from extensive discussion in this EIR: Agriculture and Forest Resources; Mineral Resources; Energy; Tribal Cultural Resources; and Wildfire. During the scoping phase for this EIR, it was determined that the project would have no impact or a less-than-significant impact related to these topics as a result of the project's characteristics and, if applicable, the implementation of the City of Oakland's (City) Standard Conditions of Approval (SCAs).

A. AGRICULTURE AND FOREST RESOURCES

As discussed in *Section V.A, Land Use and Planning*, the Oakland General Plan Land Use Map designates various urban industrial, commercial, residential, and mixed-use classifications in and surrounding the Plan Area. The Plan Area, as with the majority of developed land in the City of Oakland, is designated by the California Department of Conservation's Farmland Mapping and Monitoring Program as Urban and Built-Up Land.^{1,2} Therefore, adoption of and development under the Specific Plan would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use; would not conflict with existing zoning for agricultural use or a Williamson Act contract; and would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use. The Specific Plan therefore would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use, and would not result in the loss of forest land or conversion of forest land to non-forest use.

B. MINERAL RESOURCES

The Plan Area is located in a developed urban area and has no known existing mineral resources. Development under the Specific Plan would not require quarrying, mining, dredging, or extraction of locally important mineral resources on-site. In addition, the California Geological

¹ City of Oakland, 1996. Open Space, Conservation, & Recreation (OSCAR): An Element of the Oakland General Plan, June.

² California Department of Conservation (CDC), 2016. Farmland Mapping and Monitoring Program, California Important Farmland Finder. Available at: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/ala16.pdf>, accessed February 8, 2019.

Survey has classified lands within the San Francisco Bay Region into Mineral Resource Zones based on guidelines adopted by the California State Mining and Geology Board, as mandated by the Surface Mining and Reclamation Act of 1974. The Plan Area is mapped by the California Department of Mines and Geology as Mineral Resource Zone-1, an area where adequate information indicates a low likelihood of significant mineral resources.^{3,4} The intent of designating significant deposits is to identify areas where mineral extraction could occur prior to development. Adoption and development under the Specific Plan would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State; and would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Thus, adoption and development under the Specific Plan would have no impact on mineral resources.

C. ENERGY

Development under the Specific Plan would result in the creation of new residences and commercial operations and/or replace existing residences and commercial uses in the Plan Area. Energy would be consumed during both the construction and operational phases of future development projects under the Specific Plan. The construction phase would require energy for the manufacture and transportation of building materials, preparation (e.g., demolition and grading) of each project site, and construction of buildings and associated infrastructure. Once in operation, the completed projects would consume energy for building heating and cooling, lighting, and operation of appliances and electronics. In addition, vehicle trips associated with both construction and operation would consume fuel (primarily gasoline and diesel).

1. Construction Phase

Since construction activities associated with each development project under the Specific Plan would be temporary, individually they would not result in a long-term increase in energy consumption. Additionally, construction contractors would have a financial disincentive to waste fuel used by the construction equipment. Therefore, it is generally assumed that fuel used during construction would be conserved to the maximum extent feasible. Furthermore, regulations enforced by the California Air Resources Board (Title 13, Section 24.85 of California Code of Regulations) limit the idling time of diesel construction equipment to five minutes. Therefore, it is

³ Susan Kohler-Antablin, 1996. Generalized Mineral Land Classification Map of the South San Francisco Bay Production-Consumption Region. Available at: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_96-03/OFR_96-03_Plate1.pdf, accessed February 8, 2019.

⁴ California Department of Conservation (CDC), 1996. Update of Mineral Land Use Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Region. Available at: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_96-03/OFR_96-03_Text.pdf, accessed February 8, 2019.

anticipated that energy consumption during the construction period would be minimized to the maximum extent practical.

2. Operational Phase

a. Energy Consumption from Buildings

The City of Oakland (City) adopted the 2008 California Building Energy Efficiency Standards (Title 24, Part 6) of the California Building Code. The City's Green Building Code is codified in Title 18 Sustainability Article III- Green Building Compliance Standards of the Municipal Code. Future development projects under the Specific Plan would be required to comply with the local building codes, and indoor lighting systems would meet the minimum code efficiency requirements for Title-24 Building Energy Efficiency Standards, such as light-emitting diode (LED) lighting, occupancy sensors in offices, and daylight dimming controls in portions of the buildings illuminated by daylight.

In addition, as discussed in detail below, the City has adopted an Energy and Climate Action Plan (ECAP),⁵ which includes the following goals for building energy use:

- Construct all new buildings citywide to high energy standards.
- Retrofit 30 percent of commercial space and homes between 2010 and 2020 to reduce energy consumption.
- Achieve 32 percent electricity savings across all sectors.
- Achieve 14 percent natural gas savings across all sectors.
- Achieve a 33 percent renewable portfolio standard for grid electricity.
- Generate 3 percent of building energy consumption from new local renewable energy.

b. Energy Consumption by Vehicles

The Specific Plan promotes infill mixed-use development that would locate residents near employment/schooling opportunities and encourage alternative modes of travel to reduce energy consumption by vehicles. As discussed in *Section V.C, Air Quality*, using 2020 as a baseline year, Vehicle Miles Traveled (VMT) attributable to the Specific Plan are anticipated to increase 158 percent by 2040. The service populations would increase 122 percent during the same period. With full development under the Specific Plan by 2040, VMT and associated energy consumption would increase at a lower rate than the population growth. Therefore, per capita VMT would decrease under the Specific Plan. In addition, vehicle fuel efficiency is expected to improve

⁵ City of Oakland, 2018. City of Oakland Energy and Climate Action Plan. Updated March.

over time (as required by the Pavley⁶ and Low-Emission Vehicle regulations⁷). Therefore, the net increase in overall or per capita consumption would not be considered substantial given the lower rate of VMT increase compared to population growth and the vehicle fuel efficiency improvements.

3. Plans Related to Energy

The following policies and plans are related to energy and are designed to reduce energy consumption.

a. Downtown Oakland Specific Plan

The Specific Plan includes the following policies, which are designed to reduce energy:

Policy CH-2.2. Coordinate land-use regulations and transportation policies for reductions in vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions that meet citywide targets established in the resolutions by Council and the City's Energy and Climate Action Plan (ECAP).

Policy CH-2.13. Accelerate the electrification of private vehicles and low capacity taxi/TNC vehicles, aiming to improve air quality by significantly reducing emissions from transportation.

Policy CH-2.14. Transition to natural gas-free buildings to reduce safety and air quality/health risks in buildings.

Policy CH-2.15. Require high-albedo (reflective) surfaces on rooftops and paving where appropriate to reduce the urban heat island effect in downtown.

b. 2017 Clean Air Plan

In April 2017, the BAAQMD adopted the 2017 Clean Air Plan: Spare the Air, Cool the Climate (2017 CAP), which includes control measures for energy. Specifically, the following control measure for energy is designed to decrease the amount of electricity consumed in the Bay Area:

EN2 Decrease Electricity Demand. Work with local governments to adopt additional energy-efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.

⁶ California Air Resources Board (CARB), 2002. Assembly Bill 1493 (Pavley).

⁷ California Air Resources Board (CARB), 2012. The LEV III Amendments to the California Greenhouse Gas and Criteria Pollutant Exhaust and Evaporative Emission Standards and Test Procedure and to the On-Board Diagnostic System Requirements for Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles, and to the Evaporative Requirements for Heavy-Duty Vehicles, August 7.

This energy control measure primarily applies to electrical utility providers. Electricity in the Plan Area is currently supplied by Pacific Gas and Electric Company (PG&E), which supplies 80 percent of its electric power mix from a combination of renewable and greenhouse-gas free sources.⁸ The successful implementation of this energy control measure by PG&E would improve energy efficiency and promote the production and use of renewable energy in the Plan Area to reduce the portion of fossil fuel-based energy needed to produce the electricity that the Plan Area consumes.

The 2017 CAP also includes the following control measure for buildings to decrease energy consumption in buildings:

BL1 Green Buildings. Collaborate with partners such as KyotoUSA to identify energy-related improvements and opportunities for onsite renewable energy systems in school districts; investigate funding strategies to implement upgrades. Identify barriers to effective local implementation of the CALGreen (Title 24) statewide building energy code; develop solutions to improve implementation/enforcement. Work with ABAG's BayREN program to make additional funding available for energy-related projects in the buildings sector. Engage with additional partners to target reducing emissions from specific types of buildings.

c. Energy and Climate Action Plan

The City has also adopted an Energy and Climate Action Plan (ECAP),⁹ which was updated in 2018. The ECAP identified strategies to reduce energy consumption and greenhouse gas (GHG) emissions associated with Oakland. The ECAP will assist the City in continuing its legacy of leadership on energy, climate and sustainability issues, and provide a roadmap for the Oakland community to achieve broad community goals related to reducing GHG emissions. The overall goals for the ECAP are to reduce GHG emissions 36 percent below 2005 levels by 2020, and to reduce GHG emissions 83 percent below 2005 levels by 2050. Oakland can accomplish the 36 percent below 2005 levels reduction goal by 2020 through implementation of the following targets/actions, which are also related to energy reduction:

- 20 percent reduction in vehicle miles traveled annually as residents, workers and visitors meet daily needs by walking, bicycling, and using transit.
- 24 million gallons of oil saved annually due to less driving and more fuel-efficient vehicles on local roads.
- 32 percent decrease in electricity consumption through renewable generation, conservation and energy efficiency.

⁸ Pacific Gas and Electric (PG&E), 2019. Clean Energy Solutions. Available at: https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page, accessed April 16, 2019.

⁹ City of Oakland, 2018. City of Oakland Energy and Climate Action Plan. Updated March.

- 14 percent decrease in natural gas consumption through building retrofits, solar hot water projects and conservation.
- 62 million kWh and 2.7 million therms annually of new renewable energy used to meet local needs.
- 375,000 tons of waste diverted away from local landfills through waste reduction, reuse, recycling, and composting.

The ECAP includes more than 150 actions that will enable Oakland to achieve the 36 percent below 2005 levels reduction goal by 2020. The ECAP includes priority actions among all action items related to the three primary GHG reduction categories (transportation and land use, building energy use, and material consumption and waste), along with a set of highlighted community engagement recommendations, and steps to assist Oakland in adapting to climate change. As of early 2017, 32 action items have been completed or are fully underway. According to the most recent calculation for 2015 GHG emissions, the overall GHG emissions decreased by 16.4 percent compared to 2005 levels, and the largest overall reductions for GHG emissions were from building energy use (6.7 percent).¹⁰ Although the City has made substantial progress in reducing GHG emissions, much work still remains to be done to meet the 2020 goal.

The ECAP includes specific goals for building energy use as discussed above under Energy Consumption from Buildings. Achievement of the above goals will help ensure the city continues to reduce GHG emissions to accomplish the 83 percent below 2005 levels reduction goal by 2050.

4. SCAs

The following SCAs related to energy would be applicable to the Specific Plan:

SCA-PUB-1: Construction and Demolition Waste Reduction and Recycling (#84)

Applicable To: All construction projects.

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.

¹⁰ City of Oakland, 2018. 2015 Greenhouse Gas Emissions Inventory Report, March.

When Required: Prior to approval of construction-related permit

Initial Approval: Public Works Department, Environmental Services Division Monitoring/Inspection: Public Works Department, Environmental Services Division

SCA-UTL-8: Underground Utilities (#85)

Applicable To: All construction projects.

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-UTL-9: Recycling Collection and Storage Space (#86)

Applicable To: All projects that involve any of the following:

- a. New residential development of five or more units;
- b. Alterations to existing residential development of five or more units that increase the floor area by 30% or more;
- c. New commercial or industrial development;
- d. Alterations to existing commercial or industrial development that increase the floor area by 30% or more;
- e. New public facilities; or
- f. Alterations to areas of existing public facilities used for collecting and loading solid waste.

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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-UTL-10: Green Building Requirements (#87)

Applicable To: all projects involving any the following:

Residential

- a. New Construction of a One or Two Family Dwelling
- b. New Construction of a Multi-Family Dwelling (3+ units);
- c. Additions or Alterations to a One or Two Family Dwelling over 1,000 sq. ft. of total floor area; or

- d. Construction of or Alteration to Residential Units (any amount) that Receive City Funding (NOFA projects)

Non-Residential

- a. New Construction of Non-Residential Building over 25,000 sq. ft. of total floor area; or
b. Major Alterations (see Green Building Definitions) over 25,000 sq. ft. of total floor area to a Non-Residential Building.]

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. For the single and multi-family housing, the requirements are: completed GPR checklist, pre-requisites except J5.1, a minimum 23 points (3 Community; 6 IAQ/Health; 6 Resources; 8 Water), CALGreen mandatory measures for residential new construction, and Green Building Compliance Verification (GreenPoint Rater). For the non-residential portion of the project, the requirements are completed checklist or checklists as necessary, pre-requisites and all applicable measures on the Small Commercial Checklist (except Section 5: Improved Energy Efficiency and Section 3: Heat Island Effect (due to the cool roof requirements)), CALGreen mandatory measures for non-residential additions and alterations, and a Green Building Compliance Verification.
 - 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.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

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.

When Required: Prior to Final Approval

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-UTL-11: Green Building Requirements – Small Projects (#88)

Applicable To: All projects involving any of the following and are rated using the Small Commercial or Bay Friendly Basic Landscape Checklists:

- a. New Construction of Non-Residential Buildings between 5,000 and 25,000 sq. ft. of total floor area;
- b. Additions/Alterations 5,000 and 25,000 sq. ft. of total floor area to a Non-Residential Building;
- c. Additions/Alterations (not meeting the Major Alteration Definition) over 25,000 sq. ft. of total floor area to a Non-Residential Building;
- d. Additions/Alterations 5,000 and 25,000 sq. ft. of total floor area to a Historic Non-Residential Building;
- e. Additions/Alterations (not meeting the Major Alteration Definition) over 25,000 sq. ft. of total floor area to a Historic Non-Residential Building; or
- f. Construction projects with over 25,000 sq. ft. of total floor area of new construction requiring a landscape plan.]

a. Compliance with Green Building Requirements During Plan-Check

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) for projects using the [INSERT: StopWaste.Org Small Commercial Checklist or Bay Friendly Basic Landscape Checklist].

- i. The following information shall be submitted to the City for review and approval with 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 green building checklist approved during the review of a 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 (b) below.
 - Other documentation to prove compliance.
- ii. The set of plans in subsection (a) shall demonstrate compliance with the following:
- CALGreen mandatory measures.
 - All applicable green building measures identified on the checklist approved during the review of a Planning and Zoning permit, or submittal of a Request for Revision Plan-check application that shows the previously approved points that will be eliminated or substituted.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Building

Monitoring/Inspection: N/A

b. Compliance with Green Building Requirements During Construction

Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Green Building Ordinance during construction.

The following information shall be submitted to the City for review and approval:

- i. Completed copy of the green building checklists approved during review of the Planning and Zoning permit and during the review of the Building permit.
- ii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

5. Conclusion

The successful implementation of the SCAs, policies, and plans discussed above, as well as existing regulations related to building energy efficiency and vehicle fuel efficiency, would ensure that energy used during construction and operation of development that occurs under the Specific Plan would not be wasteful and would not result in additional electric power, natural gas or telecommunications facility. In addition, the Specific Plan is not anticipated to consume energy in excess of local and regional supplies or require additional generation capacity beyond general statewide expansion with the energy consumption reduction goals (if achieved), the lower rate of VMT increase compared to population growth, and the vehicle fuel efficiency improvements. Therefore, the impact related to the energy consumption during construction and operation of development under the Specific Plan is less than significant.

D. TRIBAL CULTURAL RESOURCES

Assembly Bill (AB) 52 was enacted on July 1, 2015, and establishes that “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (Public Resources Code [PRC] Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and meets either of the following criteria:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k); 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 subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding tribal cultural resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

According to Appendix G of the State CEQA Guidelines, an impact to tribal cultural resources from implementation of the Specific Plan would be significant if the Specific Plan would cause a substantial adverse change in the significance of a tribal cultural resource that meets the criteria listed in PRC Section 21074.

The City of Oakland prepared and mailed formal notification letters in accordance with the provisions of AB 52 to the Native American Heritage Commission; no responses have been received as of the publication of this Draft EIR. The Plan Area has been subject to development over the past century, and it is likely that any archaeological resources that would qualify as tribal cultural resources would be buried by fill. In addition, any development under the Specific Plan would be subject to SCA-CULT-1, SCA-CULT-2, and SCA-CULT-3 which would reduce any potential adverse effects to unknown tribal cultural resources to a less-than-significant level.

SCA-CULT-1: Archaeological and Paleontological Resources – Discovery During Construction (#33)

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 applicable to the expected resource, the data classes the resource is expected to possess, and how 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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

SCA-CULT-2: Archaeologically Sensitive Areas – Pre-Construction Measures (#34)

Requirement: The project applicant shall implement either Provision A (Intensive Pre-Construction Study) or Provision B (Construction ALERT Sheet) concerning archaeological resources.

Provision A: Intensive Pre-Construction Study. The project applicant shall retain a qualified archaeologist to conduct a site-specific, intensive archaeological resources study for review and approval by the City prior to soil-disturbing activities occurring on the project site. The purpose of the site-specific, intensive

archaeological resources study is to identify early the potential presence of history-period archaeological resources on the project site. At a minimum, the study shall include:

- a. Subsurface presence/absence studies of the project site. Field studies may include, but are not limited to, auguring and other common methods used to identify the presence of archaeological resources.
- b. A report disseminating the results of this research.
- c. Recommendations for any additional measures that could be necessary to mitigate any adverse impacts to recorded and/or inadvertently discovered cultural resources.

If the results of the study indicate a high potential presence of historic-period archaeological resources on the project site, or a potential resource is discovered, the project applicant shall hire a qualified archaeologist to monitor any ground disturbing activities on the project site during construction and prepare an ALERT sheet pursuant to Provision B below that details what could potentially be found at the project site. Archaeological monitoring would include briefing construction personnel about the type of artifacts that may be present (as referenced in the ALERT sheet, required per Provision B below) and the procedures to follow if any artifacts are encountered, field recording and sampling in accordance with the Secretary of Interior's Standards and Guidelines for Archaeological Documentation, notifying the appropriate officials if human remains or cultural resources are discovered, and preparing a report to document negative findings after construction is completed if no archaeological resources are discovered during construction.

Provision B: Construction ALERT Sheet. The project applicant shall prepare a construction "ALERT" sheet developed by a qualified archaeologist for review and approval by the City prior to soil-disturbing activities occurring on the project site. The ALERT sheet shall contain, at a minimum, visuals that depict each type of artifact that could be encountered on the project site. Training by the qualified archaeologist shall be provided to the project's prime contractor, any project subcontractor firms (including demolition, excavation, grading, foundation, and pile driving), and utility firms involved in soil-disturbing activities within the project site.

The ALERT sheet shall state, in addition to the basic archaeological resource protection measures contained in other standard conditions of approval, all work must stop and the City's Environmental Review Officer contacted in the event of discovery of the following cultural materials: concentrations of shellfish remains; evidence of fire (ashes, charcoal, burnt earth, fire-cracked rocks); concentrations of bones; recognizable Native American artifacts (arrowheads, shell beads, stone mortars [bowls], humanly shaped rock); building foundation remains; trash pits, privies (outhouse holes); floor remains; wells; concentrations of bottles, broken dishes, shoes, buttons, cut animal bones, hardware, household items, barrels, etc.; thick layers of burned building debris (charcoal, nails, fused glass, burned plaster, burned dishes); wood structural remains (building, ship, wharf); clay roof/floor tiles; stone walls or footings; or gravestones. Prior to any soil-disturbing activities, each contractor shall be responsible for ensuring that the ALERT sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, and supervisory personnel. The ALERT sheet shall also be posted in a visible location at the project site.

When Required: Prior to approval of construction-related permit; during construction

Initial Approval: Bureau of Building; Bureau of Planning

Monitoring/Inspection: Bureau of Building

SCA-CULT-3: Human Remains – Discovery During Construction (#35)

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.

When Required: During construction

Initial Approval: N/A

Monitoring/Inspection: Bureau of Building

E. WILDFIRE

The City of Oakland has drafted a Vegetation Management Plan¹¹ that evaluates the specific wildfire hazard factors in the City's very high fire hazard severity zone and establishes a framework for managing vegetative fuel loads on City-owned properties and along roadways, such that wildfire hazard is reduced and negative environmental effects resulting from vegetation management activities are avoided or minimized. The Plan Area is located more than two miles from the nearest areas subject to the requirements of the Vegetation Management Plan and is located in a highly urbanized area.¹² Areas subject to the very high fire hazard severity zone are typically in the Oakland Hills close to a large amount of vegetation. The Plan Area is not close to these areas. The period for the highest risk of fire in the Oakland Hills starts in September as the fog recedes earlier in the day and vegetation begins to dry out from regular, dry, offshore winds, and ends in November with the onset of winter rainfall, cooler temperatures, and higher relative humidity.

Impacts associated with implementation of the Specific Plan and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to wildfires given the distance of the Plan Area from the City's very high fire hazards severity zone.

¹¹ Oakland Fire Department, 2018. Draft Vegetation Management Plan, City of Oakland, California, May.

¹² Ibid.

VII. ALTERNATIVES

The CEQA Guidelines require the analysis of a reasonable range of alternatives to the “proposed project,” which in this EIR is the Downtown Oakland Specific Plan (Specific Plan or Plan). The reasonable range of alternatives considered should feasibly attain most of the Plan’s basic objectives and avoid or substantially lessen any of the significant effects of the Plan. The range of alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.¹ An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation.

The primary purpose of this chapter is to ascertain whether there are alternatives of design, scale, land use, or location that would substantially lessen the Plan’s significant impacts, even if those alternatives would “impede to some degree the attainment of the project objectives, or would be more costly.”²

The three project alternatives considered include:

1. **No Project Alternative 1:** Under this alternative, the Specific Plan would not be adopted, and therefore the Specific Plan would not occur. However, the No Project Alternative does include reasonably foreseeable development that could occur even without adoption of and development under the Specific Plan. This includes certain projects that are already approved but not built.
2. **Partially Mitigated Alternative 2:** Under this alternative, the Plan Area would be developed at a lower intensity throughout the Plan Area, such that all development (both commercial and residential) would be reduced by 25 percent.
3. **Reduced Office Alternative 3:** This alternative analyzes the development program from the January 2019 Preliminary Plan, which includes approximately the same number of residential units with a reduction of 2,814,500 square feet of commercial square footage.³

Comparisons of these alternatives with the project are provided in Table VII-1.

¹ CEQA Guidelines, Section 15126.6.

² CEQA Guidelines, Section 15126.6(b).

³ Note that the January 2019 Preliminary Plan used a ratio of 1.7 residents per unit.

TABLE VII-1 SUMMARY OF ALTERNATIVES TO THE PROJECT

	Existing Baseline	Downtown Development Program (Project)	No Project Alternative 1	Partially Mitigated Alternative 2	Reduced Office Alternative 3
Residential Units	12,030	29,100 ^a	11,518	21,825	29,100
Total Commercial (sf)	23,039,803	20,050,000	11,774,414	15,037,500	17,240,000
Flex Industrial (sf)	1,788,992	260,000	---	195,000	190,000
Institutional (sf)	3,646,073	1,310,000	---	982,500	1,300,000
Service Population					
Employees	68,665	60,500	26,197	45,375	58,600
Residents	19,220	52,600 ^b	20,790	39,450	49,500 ^b
Total	87,885	113,100	46,987	84,825	108,100

Note: sf = square feet

^a The Downtown Development Program uses an occupancy rate of 95 percent.

^b The Downtown Development Program uses a ratio of 1.9 residents per unit, while the Reduced Office Alternative 3 (from the January 2019 Preliminary Plan) used a ratio of 1.7 residents per unit.

Source: Public Review Draft Plan, August 2019.

The remainder of this chapter is organized as follows: overview of project objectives and impacts; description of alternatives considered and rejected; description and analysis of CEQA project alternatives; and discussion of environmentally superior alternatives.

A. PROJECT OBJECTIVES AND IMPACTS

The Specific Plan is described in detail in *Chapter III, Project Description*, and the potential environmental effects of the Plan are analyzed in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures*. The Plan's objectives and impacts are summarized below.

1. Project Objectives

In accordance with CEQA Guidelines Section 15124, an EIR must present a statement of project objectives, which in the case of a Specific Plan are often the same as the Plan objectives. In this EIR, and as presented in *Chapter III, Project Description*, the Plan's six goals as well as 15 associated outcomes are used here as the project objectives. The six goals and 15 outcomes or objectives are:

- **Goal 1:** Create opportunities for economic growth and security for all Oaklanders.

- **Economic Opportunity Outcome E-1:** Economic activity builds community wealth and fuels the constant improvement of local conditions.
- **Economic Opportunity Outcome E-2:** Downtown provides affordable, accessible space for businesses and community organizations, and sustains employment opportunities across a broad array of job skills.
- **Economic Opportunity Outcome E-3:** Access to services, jobs, education, and training gives all Oaklanders an opportunity to find local employment and economic security.
- **Goal 2:** Ensure sufficient housing is built and retained to meet the varied needs of current and future residents.
 - **Housing Outcome H-1:** Sufficient housing is built and retained downtown to support a full range of lifestyles and choices essential to Oaklanders.
 - **Housing Outcome H-2:** Current and long-time Oaklanders remain an important part of the community.
- **Goal 3:** Make downtown's streets comfortable, safe, and inviting and improve connections to the city as a whole so that everyone has efficient and reliable access to downtown's jobs and services.
 - **Mobility Outcome M-1:** Downtown is well-connected across its internal and adjacent neighborhoods with bicycle and pedestrian networks that are accessible and safe for people of all ages and abilities.
 - **Mobility Outcome M-2:** Communities that are more transit-dependent are well-served to travel to and from downtown with frequent, reliable, and safe transit service.
 - **Mobility Outcome M-3:** Oaklanders connect to downtown's resources with transportation options that accommodate people of all ages and abilities from their front door to their destination and back.
- **Goal 4:** Encourage diverse voices and forms of expression to flourish.
 - **Culture Keeping Outcome C-1:** Downtown is a place where all of Oakland's residents can see and express themselves and their culture.
 - **Culture Keeping Outcome C-2:** Festivals, outdoor art installations, and cultural events are integral elements in downtown's public sphere and spaces.
 - **Culture Keeping Outcome C-3:** Oakland's artists and creative community are able to find workspaces, performance spaces, and galleries in downtown that they can access and afford and see their work integrated into the built environment and public domain.
- **Goal 5:** Provide vibrant public spaces and a healthy environment that improves the quality of life downtown today and for generations to come.

- **Community Health Outcome CH-1:** All Oaklanders can lead safe and healthy lives, enjoying streets, public spaces, and parks downtown that provide opportunities to stay active and build community.
- **Community Health Outcome CH-2:** Environmental stewardship informs operational, planning, and capital improvement decisions to create a more sustainable downtown where everyone can adapt and thrive in the face of changing conditions.
- **Goal 6:** Develop downtown in a way that contributes to community needs and preserves Oakland's unique character.
 - **Land Use Outcome LU-1:** Development and design serve Oakland's diverse needs, contribute to improved conditions for all, and enhance downtowns' authentic, creative, and dynamic local character.
 - **Land Use Outcome LU-2:** Oakland's extensive array of historic buildings, cultural enclaves, civic organizations, and culture keepers are preserved and fortified within downtown's built environment.

2. Project Impacts

As detailed in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures* and *Chapter VI, Effects Found not to be Significant*, the Plan's impacts, with the exception of eleven significant and unavoidable impacts, would be less than significant with implementation of the City's Standard Conditions of Approval (SCAs) and/or mitigation measures. To help define project alternatives that could further reduce or eliminate significant impacts, the significant and unavoidable impacts identified as the result of development under the Specific Plan are listed below.

a. Significant and Unavoidable Transportation Impacts

- **Impact TRANS-2:** Development under the Specific Plan would generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard.
- **Impact TRANS-3:** The development under the Specific Plan would contribute to the significant degradation of several CMP or MTS segments in 2020.
- **Cumulative Impact TRANS-1:** Development under the Specific Plan together with cumulative development would generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard.

- **Cumulative Impact TRANS-2:** The development under the Specific Plan would degrade from LOS E or better to LOS F or increase the v/c ratio by 0.03 or more for segments at LOS F on the following CMP or MTS segments in 2040.

b. Significant and Unavoidable Air Quality Impacts

- **Impact AIR-1:** Operation of some large development projects under the Specific Plan could result in a cumulatively considerable net increase of criteria air pollutants for which the region is in nonattainment.

c. Significant and Unavoidable Cultural and Historic Impacts

- **Impact CULT-1:** Implementation of the Specific Plan and its associated development is anticipated to result in the demolition, destruction, or relocation of some historical resources either as individual resources and/or as contributors to historic districts.
- **Impact CULT-2:** Alterations to Historic Buildings that could occur under the Specific Plan could change the significance and character of historic resources as a result of the Specific Plan.
- **Cumulative Impact CULT-1:** Implementation of the Specific Plan and its associated development, combined with cumulative development in the Plan Area and citywide, including past, present, existing, approved, pending, and reasonably foreseeable future development, would contribute to a significant and unavoidable adverse cumulative impacts to cultural and historical resources.

d. Significant and Unavoidable Aesthetics and Shade and Shadow and Wind Impacts

- **Impact AES-1:** Implementation of the Downtown Specific Plan and development that may occur under the Plan may result in substantial new shadow that would shade solar collectors, passive solar heaters, public open space, or historic resources, or otherwise result in inadequate provision of adequate light.
- **Impact AES-2:** Implementation of the Downtown Specific Plan and development that may occur under the Plan may result in adverse wind conditions.
- **Cumulative Impact AES-1:** Implementation of the Downtown Specific Plan and development that may occur under the Plan may, in combination with other past, present, and reasonably foreseeable future projects within and around the Plan Area, result in significant cumulative wind and shadow impacts.

Potentially significant impacts that could be mitigated to a less-than-significant levels with implementation of recommended mitigation measures (as described in Table II-3, Summary of Impacts and Mitigation Measures in *Chapter II, Summary*) include:

- **Traffic and Transportation: Impact TRANS-1:** The bus-only lanes proposed in the Specific Plan may overlap with the Specific Plan’s proposed low stress bike network potentially generating transportation conflicts between bicycle and transit along corridors where both are proposed.
- **Greenhouse Gas Emissions: Impact GHG-1:** Construction and operation of development projects under the Specific Plan would generate GHG emissions that could have a significant impact on the environment.
- **Public Services, Facilities and Recreation: Impact PUB-1:** Development under the Specific Plan could increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of that facility would occur or be accelerated, or would require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.
- **Cumulative Public Services, Facilities and Recreation: Impact PUB-1:** Development under the Specific Plan, and reasonably foreseeable future projects could increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of that facility would occur or be accelerated, or would require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.
- **Utilities: Impact UTL-1:** The City’s stormwater collection system is aging and will require improvements to continue to serve the development in the downtown area that may occur in association with the Specific Plan.
- **Cumulative Utilities: Impact UTL-1:** The City’s stormwater collection system is aging and will require improvements to continue to serve the development in the downtown area that may occur in association with the Specific Plan, and reasonably foreseeable future projects within and around the Plan Area, resulting in significant cumulative stormwater impacts.

Project impacts are anticipated to be less than significant for all other environmental topics.

B. ALTERNATIVES CONSIDERED AND REJECTED

The Plan is specific to the geography of the Downtown Oakland Specific Plan boundaries; therefore, this analysis does not consider an off-site alternative. In considering the range of alternatives to be analyzed in this EIR, alternatives were identified during design development that were not selected to be further analyzed in this document, given that they would not feasibly attain most of the project’s basic objectives and avoid or substantially lessen a significant effect of the project. A fully mitigated historic resources alternative was considered and rejected because of the number and extent of designated and potentially designated historic resources

within the Plan Area. It would be infeasible to protect and otherwise not materially alter such resources given the amount of new development contemplated in the Plan. As such, two of the Plan's key goals would not be fulfilled, Goal 1: Create opportunities for economic growth and security and Goal 2: Ensure that sufficient housing is built to meet the needs of current and future residents, and therefore this alternative was rejected.

C. CEQA ALTERNATIVES CONSIDERED

The principal characteristics of each and associated effects relative to the Specific Plan are described below for each alternative. The alternatives included are intended to meet the CEQA requirement to consider a reasonable range of alternatives to the project that would feasibly attain most of the basic objectives of the project while avoiding or substantially lessening significant impacts.

The set of selected alternatives are considered to reflect a "reasonable range" of feasible alternatives in that they include reduced scenarios that lessen and/or avoid significant and unavoidable effects and less-than-significant effects of the Specific Plan. These selected alternatives would generally align with the basic objectives of the Plan, which the City would assess when it considered the merits of the Plan and the alternatives.

1. No Project Alternative

a. Principal Characteristics

Under the No Project alternative, the Specific Plan would not be adopted; therefore, the Downtown Oakland Specific Plan Development Program would not occur. However, the No Project alternative would include development that could occur even without the adoption of the Specific Plan. Under the No Project alternative, non-residential development would be substantially less than with the Plan in place. This extent of development would include reasonably foreseeable mixed-use development in the Plan Area and refers to any major project in the downtown/Jack London Square (DJL) Priority Development Area (PDA) in any phase of development from pre-application to finished construction starting in 2015. Note that because the DJL PDA includes portions of the Broadway Valdez Specific Plan, portions of the Lake Merritt Station Area Plan, and portions to the south of the Plan Area, the boundary of the DJL PDA is larger than the boundary of what is considered in the Downtown Oakland Specific Plan.

Table VII-2 shows the growth potential estimated based on development trends in the Plan Area vicinity on known proposed project sites, consistent with existing land use and zoning. Future development under the No Project alternative would continue to be consistent with the policies of the City of Oakland General Plan, specifically the Land Use and Transportation Element

(LUTE), the Housing Element, and the Historic Preservation Element. Future development would also be subject to the City’s Planning Code, Zoning Ordinance, and SCAs. Table VII-2 compares the No Project alternative development to the Downtown Oakland Specific Plan Development Program.

TABLE VII-2 NO PROJECT ALTERNATIVE COMPARED WITH DOWNTOWN OAKLAND DEVELOPMENT PROGRAM

	Downtown Development Program	No Project Alternative^a	Percent Change (Development Program Compared to No Project Alternative)
Residential Units	29,100	11,518	-61%
Total Commercial (sf)	20,050,000	11,774,414	-62%
Flex Industry (sf)	260,000	--	-100%
Institutional (sf)	1,310,000	--	-100%
Service Population			
Employees	60,500	26,197	-57%
Residents	52,600	20,790	-60%
Total	113,100	46,987	-59%

Note: sf = square feet

^a Refers to any major project in the DJL PDA in any phase of development from pre-application to finished construction starting in 2015 according to the April 2019 Major Projects List.

Source: Public Review Draft Plan, August 2019.

b. Relationship to Project Objectives

The No Project alternative would not achieve, or achieve to a lesser degree, many of the key project objectives, including those related to:

- Create opportunities for economic growth and security for all Oaklanders—Goal 1 (Objective would be partially met through new development allowed by existing General Plan and zoning.)
- Ensure sufficient housing is built and retained to meet the varied needs of current and future residents—Goal 2 (Objective would be partially met, particularly market rate housing development. Displacement would continue.)
- Make downtown’s streets comfortable, safe, and inviting and improve connections to the city as a whole so that everyone has efficient and reliable access to downtown’s jobs and

services—Goal 3 (Objective would not be met because none of the pedestrian and mobility improvements presented in the Plan would be implemented.)

- Encourage diverse voices and forms of expression to flourish—Goal 4 (Objective would not be met.)
- Provide vibrant public spaces and a healthy environment that improves the quality of life downtown today and for generations to come—Goal 5 (Objective would be partially met because the City would continue to implement its Energy and Climate Action Plan.)
- Develop downtown in a way that contributes to community needs and preserves Oakland’s unique character—Goal 6 (Objective would not be met because there would not be an implementation strategy developed as set forth in the Plan.)

c. Analysis of the No Project Alternative

(1) Land Use

Under the No Project alternative, development would still occur in the Plan Area at a smaller scale compared with the Plan, as discussed above. New development would be required to be compliant with current planning policy or regulations applicable to downtown pursuant to the current City’s General Plan and Planning Code. Unlike the Development Program, the No Project alternative would not introduce General Plan Amendments and would not propose amendments to existing areas that allow industrial uses (sites #6, #7, #19, , see Figure III-5 in *Chapter III, Project Description*). The reduced development would introduce land uses similar to those identified in the Specific Plan’s Development Program and, similar to the Specific Plan, would not result in any significant impact related to existing communities or natural resources.

(2) Transportation

The No Project alternative would generate substantially fewer vehicle, bicycle, and pedestrian trips than the Specific Plan as shown in Table VII-3.

The primary metric for assessing transportation impacts is vehicle miles travelled (VMT). As with the Specific Plan, impacts associated with implementation of the No Project alternative and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to VMT because:

- VMT generated by the No Project alternative would be more than 15 percent below the regional averages resulting in a less-than-significant VMT impact for the residential and commercial portions of the No Project alternative.

TABLE VII-3 TRIP GENERATION BY TRAVEL MODE COMPARISON WITH NO PROJECT ALTERNATIVE

Travel Mode	Mode Share Adjustment Factors ^a (%)	Daily Trips			Weekday PM Peak Hour		
		Specific Plan	No Project Alternative	Diff.	Specific Plan	No Project Alternative	Diff.
Automobile	53.0	210,310	159,770	50,540	19,134	14,449	4,685
BART/AC Transit	29.7	117,630	89,360	28,270	10,702	6,568	4,134
BART		95,574	72,605	22,969	8,695	5,337	3,358
AC Transit		22,056	16,755	5,301	2,007	1,231	776
Bike	5.1	20,200	15,350	4,850	1,838	1,128	710
Walk	10.5	41,590	31,590	10,000	3,784	2,322	1,462
Total Trips		389,730	296,070	93,660	35,458	21,761	13,697

^a Based on City of Oakland Transportation Impact Study Guidelines assuming Plan Area is in an urban environment within 0.5 miles of a BART Station. BART and AC Transit ridership based on 2017 ACS Travel to Work Survey.
Source: Fehr & Peers, 2019.

- Citywide VMT per service population would remain the same with and without the retail component of the No Project alternative, resulting in a less-than-significant VMT impact for the retail component of the No Project alternative.

The No Project alternative and its associated development are anticipated to be consistent with policies, plans, and programs addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths, similar to the proposed Specific Plan. The No Project alternative would avoid Impact TRANS-1 related to conflicts between bus-only lanes and low stress bike networks, as these are not specifically proposed as part of the No Project alternative. It is noted that some of the improvements may happen as part of the Bicycle Master Plan that the City recently adopted or as part of other Specific Plans adjacent to downtown. This alternative would also avoid Impact TRANS-2 related to exposure of roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard at the at-grade railroad crossing in Jack London District, as the “Green Loop” proposed as part of the Specific Plan would not be proposed as part of the No Project alternative.

Additionally, the No Project alternative would generate incrementally fewer peak hour vehicle trips that would likely reduce Impact TRANS-3: Impacts to Regional Roadway Segments to a less-than-significant level. The No Project alternative is expected to have slightly greater impacts on non-traffic operation topics than the Specific Plan, as some of the pedestrian and other transportation safety projects may not be developed as set forth in the Plan, and the mode shift

would move more slowly towards people using transit, bicycle or walk modes, given that non-vehicular improvements would not occur to the extent proposed by the Specific Plan. The No Project alternative would remain consistent with currently adopted policies, plans, or programs supporting alternative transportation.

In summary, the No Project alternative would avoid Impact TRANS-1, 2, and 3, but would not achieve several of the project's objectives as set forth above.

(3) Air Quality

The No Project alternative and its associated development would result in a significant and unavoidable air quality impact, consistent with Impact AIR-1. Although the amount of development anticipated under the No Project alternative is substantially less than the Specific Plan, large developments still may occur under existing General Plan and Zoning. As such, this impact is applicable to the No Project alternative.

Similar to the Specific Plan, with implementation of the City's SCAs, the No Project alternative would not result in significant plan- or project-level air quality impacts related to consistency with the Bay Area Clean Air Plan or plan- and project-level generation and exposure to toxic air contaminants, odors, or construction. Given that substantially less development and associated construction would occur under the No Project alternative as compared with the Specific Plan, they would be incrementally less impactful and would remain less than significant.

In summary, the impacts of the No Project alternative would be similar to the Specific Plan but incrementally less impactful. The alternative would not avoid Impact AIR-1 related to large projects nor would it reduce the impact to a less-than-significant level, and at the same time would not meet the project objectives as set forth above..

(4) Greenhouse Gas Emissions

Similar to the Specific Plan, the No Project alternative would comply with SB 743. As such, GHG emissions from buildout under the No Project alternative in 2040 would result in a less-than-significant impact on the environment.

The reduced amount of development and related construction activity and operations of the No Project alternative would result in lower GHG impacts than the Plan. However, the No Project alternative would still result in one significant impact like the Specific Plan: Impact GHG-1 related to construction and operation GHG emissions. Compliance with the City's SCAs, together with Mitigation Measure GHG-1 identified for the Specific Plan, would reduce the impact of the No Project alternative to a less-than-significant level.

In summary, the GHG impacts for the No Project alternative would be very similar and Impact GHG-1 would also be applicable to the No Project alternative; each impact could be mitigated to a less-than-significant level.

(5) Cultural and Historic Resources

Buildings, structures, objects, sites, and historic districts determined to be eligible for or listed on the National Register of Historic Places (NRHP), or that are included in the City's Local Register would continue under the No Project alternative. Nonetheless, given the number and extent of designated and potentially designated historic resources located in downtown it is assumed that over time, as a result of development that may occur under the No Project alternative consistent with the City's existing General Plan and Zoning, there could be loss of integrity or other material negative alteration of existing historic resources through individual projects and cumulative development. It is expected that these impacts would be less and occur slower with the No Project alternative because of less projected overall new development and adaptive reuse of historic resources. However, the reduction and slower rate would not be enough to reduce Impact CULT-1, CULT-2, and Cumulative Impact CULT-1 to a less-than-significant level. As a result, the No Project alternative would result in significant and unavoidable impacts and require Mitigation Measure CULT-1 to minimize the level of impact.

Impacts related to archaeological resources and human remains under the No Project alternative would be less than significant with implementation of the City's SCAs, consistent with the findings for the Specific Plan.

(6) Aesthetics, Shade and Shadow and Wind

The Specific Plan Area meets the criteria to be considered a transit priority area. As a result, aesthetic impacts shall not be considered significant impacts on the environment.⁴ This would be the same for the No Project alternative. While still considered less than significant (and not resulting from changes to existing conditions, on which the CEQA analysis focuses), it is worth noting that adoption and development under the Specific Plan would result in improved aesthetic conditions in the Plan Area that would not occur under the No Project alternative.

Although there would be substantially less development under the No Project alternative, there would still be potential for development to result in adverse shadow impacts if new development is unable to avoid shading of historic resources and/or on public open space such that it impairs its beneficial use. Therefore, Impact AES-1 related to shadow effects from future development would also be applicable to the No Project alternative and be conservatively significant and

⁴ CEQA Guidelines, Section 21099(d)(1).

unavoidable. In addition, Impact AES-2 related to wind would also be applicable to the No Project alternative and also be considered conservatively significant and unavoidable. Existing allowable heights permit buildings that could create adverse wind conditions. The No Project alternative would have the same cumulative significant and unavoidable wind and shadow impacts as the Plan.

(7) Biological Resources

Similar to the Specific Plan, development under the No Project alternative may impact biological resources and implementation of the SCAs would help ensure impacts on biological resources would not be significant.

(8) Geology and Soils

Development under the No Project alternative and construction activities and development operations could expose residents to geologic hazards including strong ground shaking during a seismic event, as with the adoption of and development under the Specific Plan. However, as previously discussed, substantially less development is anticipated compared to the Plan and would therefore result in fewer new residents and workers in the Plan Area. Individual projects would be required to implement the City's SCAs. The No Project alternative would maintain the same less-than-significant impacts to geology, soils, and geohazards as identified for the Plan, even though the extent of exposure and risks would be reduced given the decreased development and population.

(9) Hazards and Hazardous Materials

Construction activities under the No Project alternative involving demolition, soil disturbance, and excavation could continue to potentially expose construction workers and residents to potential hazards and hazardous materials as identified for the Specific Plan. The potential hazardous materials include asbestos, polychlorinated biphenyls (PCBs), lead-based paint, underground and aboveground storage tanks, and contaminated soil and water. New construction would have to comply with City SCAs like the Plan, so they would result in the same less-than-significant impacts as identified in the Plan, even though the extent of exposure and risks would be reduced given the decreased development and population.

(10) Hydrology and Water Quality

Development under the No Project alternative and construction activities could lead to increased contaminants being washed into the San Francisco Bay, as with the adoption and development of the Specific Plan. Development under the No Project alternative could alter drainage patterns and be susceptible to flooding hazards and inundation. However, as previously discussed, new

development would be at a smaller scale compared to the Plan and would therefore result in fewer developments and people in the Plan Area. Individual projects would be required to conform to the City's SCAs. The No Project alternative would maintain the same less-than-significant impacts to water quality as identified in the Plan.

(11) Noise

Development would still occur within the Plan Area under the No Project alternative and construction activities and development operations may create noise impacts, although for proportionally fewer residents and employees. Individual projects will need to conform to the City's SCAs. The No Project alternative would maintain the same less-than-significant impacts on noise identified with the Plan, even with relatively less construction and development operations.

(12) Population and Housing

Development and population and job growth would still occur within the Plan Area under the No Project alternative, although at a substantially lower rate. As a result, there would be approximately 31,810 fewer residents (approximately 20,790 compared with 52,600) and 34,533 fewer jobs (approximately 26,197 compared with 60,730), a 57 percent and 60 percent decrease respectively, within the Plan Area by 2040. The No Project alternative would maintain the same less-than-significant impacts regarding the displacement of substantial housing, people, businesses, and jobs as identified for adoption of and development under the Specific Plan. The number of employees and residents in the No Project alternative would be less than what was projected in the DJL PDA for 2040.

(13) Public Services, Facilities and Recreation

Development would occur at a much lower rate within the Plan Area under the No Project alternative, resulting in significantly less demand for public services and recreation facilities. Fewer police, fire, and emergency services and facilities would be needed, and there would be less demand for schools given the reduced housing and demand for parks and recreational facilities. It is not anticipated that new physical facilities would be required, the construction of which could have adverse environmental effects. However, as with the Plan impacts, the No Project alternative would increase the demand for parkland, and the City would continue to fall short of its local-serving parkland goal of 4 acres per 1,000 resident, regardless of adoption and development under the Specific Plan. Therefore, the No Project alternative would continue to have a significant impact related to Impact PUB-1 and Cumulative Impact PUB-1, meeting the City's parkland goal, but it could be mitigated to a less-than-significant level with the two-part Mitigation Measure PUB-2 recommended for the Specific Plan. The No Project alternative would maintain the same less-than-significant impacts to public services (fire services, police services, and libraries) as identified in the Plan.

(14) Utilities

Development would occur at a much lower rate within the Plan Area under the No Project alternative, resulting in significantly less demand for utilities and service systems. Less water and energy services and wastewater and solid waste disposal would be needed. It is not anticipated that new physical facilities would be required, the construction of which could have adverse environmental effects. However, given that the City's stormwater collection system is aging and will require improvements to serve the downtown area, Impact UTL-1 and Cumulative Impact UTL-1 would still remain despite the lower rate of development and population and employment assumed under the No Project alternative. The No Project alternative would maintain the same less-than-significant impacts to wastewater, water, solid waste and energy as identified in the Plan.

2. Partially Mitigated Alternative

a. Principal Characteristics

The Partially Mitigated alternative reduces the growth and development anticipated within the Plan Area under the adoption and development of the Specific Plan to levels more similar to those anticipated in the DJL PDA (see Table VII-4 below), and would reduce total development by 25 percent for residential units and commercial square footage. Therefore, the growth of new businesses (jobs) and population also would be reduced. The Partially Mitigated alternative comprises a development program that is reduced to a great extent while continuing to be feasible from a market standpoint (i.e., not less development than assumed for the No Project alternative).

As described in *Section V.I, Population and Housing*, the Specific Plan would result in a greater growth of jobs than anticipated in the DJL PDA. Growth due to adoption of and development under the Specific Plan would account for 143 percent of projected population growth in the DJL PDA and 157 percent of projected job growth. By lowering the development potential of the Plan Area by approximately 25 percent, population and job growth will decrease by 25 percent as well. While this would be a reduction in development from the Specific Plan, it would not reduce population or employment to levels anticipated in the DJL PDA.

This reduction of development as result of the Partially Mitigated alternative would occur sporadically throughout the Plan Area. The Partially Mitigated alternative would differ from the Specific Plan in that it would have less intense development, including reduced heights, floor area ratio (FAR), as well as fewer proposed buildings. All other aspects of the Specific Plan would remain including general plan amendments, circulation and street network changes, and public realm improvements.

TABLE VII-4 PARTIALLY MITIGATED ALTERNATIVE COMPARED WITH DOWNTOWN OAKLAND DEVELOPMENT PROGRAM

	Downtown Development Program	Growth in DJL PDA 2010-2040	Partially Mitigated Alternative	Percent Change (Development Program Compared to Partially Mitigated Alternative)
Residential Units	29,100	---	21,825	-25%
Total Commercial (sf)	20,060,000	---	15,037,500	-25%
Flex Industry (sf)	260,000	---	195,000	-25%
Institutional (sf)	1,310,000	---	982,500	-25%
Service Population				
Employees	60,730	38,430	45,375	-25%
Residents	52,600	36,640	39,450	-25%
Total	113,330	75,070	84,825	-25%

Note: sf = square feet

Source: Public Review Draft Plan, August 2019.

b. Relationship to Project Objectives

The Partially Mitigated alternative would achieve many of the project objectives, including those related to:

- Making downtown’s streets comfortable, safe, and inviting and improving connections to the city as a whole so that everyone has efficient and reliable access to downtown’s jobs and services.
- Providing vibrant public spaces and a healthy environment that improves the quality of life downtown today and for generations to come.
- Preserving Oakland’s historic buildings.

The Partially Mitigated alternative would achieve to a lesser degree other key project objectives including:

- Creating opportunities for economic growth and security for all Oaklanders.
- Ensuring sufficient housing is built and retained to meet the varied needs of current and future residents.

- Developing a wide array of spaces that contribute to the diverse, creative character of the community.

c. Analysis of the Partially Mitigated Alternative

(1) Land Use

Under the Partially Mitigated alternative, development would still occur in the Plan Area at a smaller scale compared with the Plan, as discussed above. New development would be required to be compliant with current planning policy or regulations applicable to downtown pursuant to the current City's General Plan and Planning Code. The reduced development would likely result in lower heights throughout the Plan Area. This reduced development scale would decrease creation of new land uses and buildings that could disrupt existing communities and natural resources. The reduced development would introduce land uses similar to those identified in the Specific Plan's Development Program and similarly to the Specific Plan would not result in any significant impact related to existing communities or natural resources.

(2) Transportation

The Partially Mitigated alternative would generate substantially fewer vehicle, bicycle, and pedestrian trips than the Specific Plan as shown in Tables VII-5.

The primary metric for assessing transportation impacts is VMT. As with the Specific Plan, impacts associated with implementation of the Partially Mitigated alternative and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to VMT because:

- VMT generated by the Partially Mitigated alternative would be more than 15 percent below the regional averages resulting in a less-than-significant VMT impact for the residential and commercial portions of the Partially Mitigated alternative.
- Citywide VMT per service population would remain the same with and without the retail component of the Partially Mitigated alternative, resulting in a less-than-significant VMT impact for the retail component of the Partially Mitigated alternative.

The Partially Mitigated alternative and its associated development are anticipated to be consistent with policies, plans, and programs addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths, similar to the proposed Specific Plan. Impact TRANS-2 and Cumulative Impact TRANS-1 from the Development Program would remain in the Partially Mitigated alternative because the Partially Mitigated alternative would still generate additional multi-modal traffic traveling across the at-

TABLE VII-5 TRIP GENERATION BY TRAVEL MODE COMPARISON WITH PARTIALLY MITIGATED ALTERNATIVE

Travel Mode	Mode Share Adjustment Factors ^a (%)	Daily Trips			Weekday PM Peak Hour		
		Specific Plan	Partially Mitigated Alternative	Diff.	Specific Plan	Partially Mitigated Alternative	Diff.
Automobile	53.0	210,310	159,770	50,540	19,134	11,743	7,391
BART/AC Transit	29.7	117,630	89,360	28,270	10,702	6,568	4,134
BART		95,574	72,605	22,969	8,695	5,337	3,358
AC Transit		22,056	16,755	5,301	2,007	1,231	776
Bike	5.1	20,200	15,350	4,850	1,838	1,128	710
Walk	10.5	41,590	31,590	10,000	3,784	2,322	1,462
Total Trips		389,730	296,070	93,660	35,458	21,761	13,697

^a Based on City of Oakland Transportation Impact Study Guidelines assuming Plan Area is in an urban environment within 0.5 miles of a BART Station. BART and AC Transit ridership based on 2017 ACS Travel to Work Survey.
Source: Fehr & Peers, 2019.

grade railroad crossings that would cause or expose roadway uses (e.g., motorists, pedestrians, bus riders, and bicyclists) to a permanent or substantial transportation hazard.

The Partially Mitigated alternative would generate incrementally fewer peak hour vehicle trips that would lessen Impact TRANS-3: Impacts to Regional Roadway Segments but it is possible that this impact would remain significant and unavoidable. The Partially Mitigated alternative would remain consistent with currently adopted policies, plans, or programs supporting alternative transportation.

In summary, the Partially Mitigated alternative would reduce Cumulative Impact TRANS-2, but it may remain significant and unavoidable.

(3) Air Quality

The Partially Mitigated alternative and its associated development would result in a significant and unavoidable air quality impact, consistent with Impact AIR-1. Although the amount of development anticipated under the Partially Mitigated alternative is less than the Specific Plan, large developments still may occur under existing General Plan and Zoning and as such this impact is applicable to the Partially Mitigated alternative.

Similar to the Specific Plan, with implementation of the City's SCAs, the Partially Mitigated alternative would not result in significant plan- or project-level air quality impacts related to consistency with the Bay Area Clean Air Plan, or plan- and project-level generation and exposure to toxic air contaminants, odors, or construction. Given that less development and associated construction would occur under the Partially Mitigated alternative as compared with the Specific Plan, these would be incrementally less impactful and would remain less than significant.

In summary, the impacts of the Partially Mitigated alternative would be similar to the Specific Plan but incrementally less impactful. The alternative would not avoid Impact AIR-1 related to large projects, and if large projects are developed, the impact may remain significant and unavoidable.

(4) Greenhouse Gas Emissions

Similar to the Specific Plan, the Partially Mitigated alternative would comply with SB 743 and as a result GHG emissions from buildout under the Partially Mitigated alternative in 2040 would result in a less-than-significant impact on the environment.

The reduced amount of development and related construction activity and operations of the Partially Mitigated alternative would result in lower GHG impacts than the Plan. However, the Partially Mitigated alternative would still result in one significant impact like the Specific Plan: Impact GHG-1 related to construction. Compliance with the City's SCAs together with Mitigation Measure GHG-1 identified for the Specific Plan would reduce the impact of the Partially Mitigated alternative to a less-than-significant level.

In summary, the GHG impacts for the Partially Mitigated alternative would be very similar and Impact GHG-1 would also be applicable to the Partially Mitigated alternative; each impact could be mitigated to a less-than-significant level.

(5) Cultural and Historic Resources

With the decrease in development for both residential and commercial square footage by 25 percent (thus reducing proposed heights and FARs anticipated in the Development Program, as well as fewer buildings), it is expected that there will be some decrease in the level of impacts to cultural and historic resources. However, given the amount of new development contemplated, there could still be significant and unavoidable historic resource impacts, and while the Partially Mitigated alternative would lessen Impact CULT-1, CULT-2, and Cumulative Impact CULT-1, it would not entirely eliminate these impacts.

(6) Aesthetics, Shade and Shadow and Wind

The Specific Plan Area meets the criteria to be considered a transit priority area. As a result, aesthetic impacts shall not be considered significant impacts on the environment.⁵ This would be the same for the Partially Mitigated alternative.

Although there would be less development under the Partially Mitigated alternative, and a reduction in heights, there would still be potential for development to result in adverse shadow impacts if new development is unable to avoid shading of historic resources and/or on public open space such that it impairs its beneficial use. Therefore, Impact AES-1 related to shadow effects from future development would also be applicable to the Partially Mitigated alternative and be conservatively significant and unavoidable. In addition, Impact AES-2 related to wind would also be applicable to the Partially Mitigated alternative and also be considered conservatively significant and unavoidable. Existing allowable heights permit buildings that could create adverse wind conditions. The Partially Mitigated alternative would have the same cumulative significant and unavoidable wind and shadow impacts as the Plan.

(7) Biological Resources

Similar to the Specific Plan, development under the Partially Mitigated alternative may impact biological resources and implementation of the SCAs would help ensure impacts on biological resources would not be significant.

(8) Geology and Soils

Development under the Partially Mitigated alternative and construction activities and development operations could expose residents to geologic hazards including strong ground shaking during a seismic event, as with the adoption of and development under the Specific Plan. However, as previously discussed, substantially less development is anticipated compared to the Plan and would therefore result in fewer new residents and workers in the Plan Area. Individual projects would be required to implement the City's SCAs. The Partially Mitigated alternative would maintain the same less-than-significant impacts to geology, soils, and geohazards as identified for the Plan, even though the extent of exposure and risks would be reduced given the decreased development and population.

(9) Hazards and Hazardous Materials

Construction activities under the Partially Mitigated alternative involving demolition, soil disturbance, and excavation could continue to potentially expose construction workers and

⁵ Ibid.

residents to potential hazards and hazardous materials as identified for the Specific Plan. The potential hazardous materials include asbestos, PCBs, lead-based paint, underground and aboveground storage tanks, and contaminated soil and water. New construction would have to comply with City SCAs like the Plan, so they would result in the same less-than-significant impacts as identified in the Plan, even though the extent of exposure and risks would be reduced given the decreased development and population.

(10) Hydrology and Water Quality

Development under the Partially Mitigated alternative and construction activities could lead to increased contaminants being washed into the San Francisco Bay, as with the adoption and development of the Specific Plan. Development under the Partially Mitigated alternative could alter drainage patterns and be susceptible to flooding hazards and inundation. However, as previously discussed, new development would be at a smaller scale compared to the Plan and would therefore result in fewer developments and people in the Plan Area. Individual projects would be required to conform to the City's SCAs. The Partially Mitigated alternative would maintain the same less-than-significant impacts to water quality as identified in the Plan.

(11) Noise

Development would still occur within the Plan Area under the Partially Mitigated alternative and construction activities and development operations may create noise impacts, although for proportionally fewer residents and employees. Individual projects will need to conform to the City's SCAs. The Partially Mitigated alternative would maintain the same less-than-significant impacts on noise identified with the Plan, even with relatively less construction and development operations.

(12) Population and Housing

Development and population and job growth would still occur within the Plan Area under the Partially Mitigated alternative, although at a lower rate. As a result, there would be approximately 13,150 fewer residents and 15,125 fewer jobs, a 25 percent decrease respectively, within the Plan Area by 2040. As discussed in *Section V.I, Population and Housing*, the project exceeds the Plan Bay Area projections for the DJL PDA. The level of reduction to stay within the DJL PDA employment and residents is unmet under this alternative.⁶ The Partially Mitigated alternative would maintain the same less-than-significant impacts regarding the displacement of substantial housing, people, businesses, and jobs as identified with the Plan.

⁶ The reduction to stay within the DJL PDA is 2,810 less people and 6,945 less jobs than what is currently anticipated under the Partially Mitigated alternative.

(13) Public Services, Facilities and Recreation

Development would occur at a lower rate within the Plan Area under the Partially Mitigated alternative, resulting in significantly less demand for public services and recreation facilities. Fewer police, fire, and emergency services and facilities would be needed, and there would be less demand for schools given the reduced housing and demand for parks and recreational facilities. It is not anticipated that new physical facilities would be required, the construction of which could have adverse environmental effects. However, as with the Plan impacts, the Partially Mitigated alternative would still increase the demand for parkland, and the City would continue to fall short of its local-serving parkland goal of 4 acres per 1,000 resident, regardless of adoption and development under the Specific Plan. Therefore, the Partially Mitigated alternative would continue to have a significant impact related to Impact PUB-1 and Cumulative Impact PUB-1, meeting the City's parkland goal, but it could be mitigated to a less-than-significant level with the two-part Mitigation Measure PUB-2 recommended for the Specific Plan. The Partially Mitigated alternative would maintain the same less-than-significant impacts to public services (fire services, police services, and libraries) as identified in the Plan.

(14) Utilities

Development would occur at a lower rate within the Plan Area under the Partially Mitigated alternative, resulting in significantly less demand for utilities and service systems. Less water and energy services and wastewater and solid waste disposal would be needed. It is not anticipated that new physical facilities would be required, the construction of which could have adverse environmental effects. However, given that the City's stormwater collection system is aging and will require improvements to serve the downtown area, Impact UTL-1 and Cumulative Impact UTL-1 would still remain despite the lower rate of development and population and employment assumed under the Partially Mitigated alternative. The Partially Mitigated alternative would maintain the same less-than-significant impacts to wastewater, water, solid waste and energy as identified in the Plan.

3. Reduced Office Alternative

a. Principal Characteristics

The Downtown Oakland Specific Plan Development Program is based on detailed analysis of available opportunity sites, historic turnover rates, and the estimated demand for new development in the Plan Area. The Reduced Office alternative analyzes the development program from the January 2019 Preliminary Plan which includes approximately the same number of residential units but a reduction of 2,814,500 square feet of commercial square footage.

The Reduced Office alternative would not include the Howard Terminal Option. In addition, the land use changes as a result of the Howard Terminal Option would not occur such that the area between Brush, Clay, 2nd and 4th streets would not become Mixed Use Flex. All other aspects of the Specific Plan would remain.

b. Relationship to Project Objectives

The Reduced Office alternative would achieve many of the project objectives, including those related to:

- Making downtown's streets comfortable, safe, and inviting and improving connections to the city as a whole so that everyone has efficient and reliable access to downtown's jobs and services.
- Providing vibrant public spaces and a healthy environment that improves the quality of life downtown today and for generations to come.
- Preserving Oakland's historic buildings.
- Ensuring sufficient housing is built and retained to meet the varied needs of current and future residents.

The Reduced Office alternative would achieve to a lesser degree other key project objectives including:

- Creating opportunities for economic growth and security for all Oaklanders given that the Reduced Office alternative would result in 2,130 fewer jobs than the project.
- Developing a wide array of spaces that contribute to the diverse, creative character of the community.

c. Analysis of the Reduced Office Alternative

(1) Land Use

Under the Reduced Office alternative, development would still occur in the Plan Area at a smaller scale compared with the Plan, as discussed above. New development would be required to be compliant with current planning policy or regulations applicable to downtown, pursuant to the current City's General Plan and Planning Code. This reduced development scale would decrease creation of new land uses and buildings that could disrupt existing communities and natural resources. The reduced development would introduce land uses similar to those identified in the Specific Plan's Development Program and, similar to the Specific Plan, would not result in any significant impact related to existing communities or natural resources. The Reduced Office alternative would not include the Howard Terminal Option

(2) Transportation

The Reduced Office alternative would generate fewer vehicle, bicycle, and pedestrian trips than the Specific Plan as shown in Table VII-6.

TABLE VII-6 TRIP GENERATION BY TRAVEL MODE COMPARISON WITH REDUCED OFFICE ALTERNATIVE

Travel Mode	Mode Share Adjustment Factors ^a (%)	Daily Trips			Weekday PM Peak Hour		
		Specific Plan	Reduced Office Alternative	Diff.	Specific Plan	Reduced Office Alternative	Diff.
Automobile	53.0	210,310	194,940	15,370	19,134	17,542	1,592
BART/AC Transit	29.7	117,630	109,030	8,600	10,702	9,812	890
BART		95,574	88,596	6,978	8,695	7,973	722
AC Transit		22,056	20,434	1,622	2,007	1,839	168
Bike	5.1	20,200	18,720	1,480	1,838	1,685	153
Walk	10.5	41,590	38,550	3,040	3,784	3,469	315
Total Trips		389,730	361,240	28,550	35,458	32,508	2,950

^a Based on City of Oakland Transportation Impact Study Guidelines assuming Plan Area is in an urban environment within 0.5 miles of a BART Station. BART and AC Transit ridership based on 2017 ACS Travel to Work Survey. Source: Fehr & Peers, 2019.

The primary metric for assessing transportation impacts is VMT. The Specific Plan impacts associated with implementation of the Reduced Office alternative and reasonably foreseeable development expected to occur in the Plan Area over the next 20 years would be less than significant related to VMT because:

- VMT generated by the Reduced Office alternative would be more than 15 percent below the regional averages, resulting in a less-than-significant VMT impact for the residential and commercial portions of the Reduced Office alternative.
- Citywide VMT per service population would remain the same with and without the retail component of the Reduced Office alternative, resulting in a less-than-significant VMT impact for the retail component of the Reduced Office alternative.

The Reduced Office alternative and its associated development are anticipated to be consistent with policies, plans, and programs addressing the safety or performance of the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths, similar to the proposed Specific Plan. Impact TRANS-2 and Cumulative Impact TRANS-1 from the Development Program would remain with the Reduced Office alternative because the Reduced Office alternative would

still generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, and bicyclists) to a permanent or substantial transportation hazard.

The Reduced Office alternative would generate incrementally fewer peak hour vehicle trips, but would only incrementally reduce Impact TRANS-3: Impacts to Regional Roadway Segments and Cumulative Impact TRANS-2 to a less-than-significant level. The Reduced Office alternative would remain consistent with currently adopted policies, plans, or programs supporting alternative transportation.

(3) Air Quality

The Reduced Office alternative and its associated development would result in a significant and unavoidable air quality impact, consistent with Impact AIR-1 identified for the project. Although the amount of development anticipated under the Reduced Office alternative is less than the Specific Plan, large developments still may occur under existing General Plan and Zoning and as such this impact is applicable to the Reduced Office alternative.

Similar to the Specific Plan, with implementation of the City's SCAs, the Reduced Office alternative would not result in significant plan- or project-level air quality impacts related to consistency with the Bay Area Clean Air Plan or plan- and project-level generation and exposure to toxic air contaminants, odors, or construction. Given that less development and associated construction would occur under the Reduced Office alternative as compared with the Specific Plan, these would be incrementally less impactful and would remain less than significant.

In summary, the impacts of the Reduced Office alternative would be similar to the Specific Plan but incrementally less impactful. The alternative would not avoid Impact AIR-1 related to large projects nor would it reduce it to a less-than-significant level.

(4) Greenhouse Gas Emissions

Similar to the Specific Plan, the Reduced Office alternative would comply with SB 743 and as a result, GHG emissions from buildout under the Reduced Office alternative in 2040 would result in a less-than-significant impact on the environment.

The reduced amount of development and related construction activity and operations of the Reduced Office alternative would result in lower GHG impacts than the Plan. However, the Reduced Office alternative would still result in one significant impact like the proposed project: Impact GHG-1 related to construction and operation GHG emissions. Compliance with the City's SCAs, together with Mitigation Measure GHG-1 identified for the Specific Plan, would reduce the impact of the Reduced Office alternative to a less-than-significant level.

In summary, the GHG impacts for the Reduced Office alternative would be very similar and Impact GHG-1 would also be applicable to the Reduced Office alternative; each impact could be mitigated to a less-than-significant level.

(5) Cultural and Historic Resources

With the decrease in development for commercial square footage (thus reducing proposed heights anticipated in the Development Program) it is expected that there would be some decrease in the level of impacts to cultural and historic resources. However, given the amount of new development contemplated, there could still be significant and unavoidable historic resource impacts. While the Reduced Office alternative would lessen Impact CULT-1, CULT-2, and Cumulative Impact CULT-1, it would not entirely eliminate these impacts.

(6) Aesthetics, Shade and Shadow and Wind

The Plan Area meets the criteria to be considered a transit priority area. As a result, aesthetic impacts shall not be considered significant impacts on the environment.⁷ This would be the same for the Reduced Office alternative.

Although there would be less development under the Reduced Office alternative, and a reduction in heights, there would still be potential for development to result in adverse shadow impacts if new development is unable to avoid shading of historic resources and/or on public open space such that it impairs its beneficial use. Therefore, Impact AES-1 related to shadow effects from future development would also be applicable to the Reduced Office alternative and be conservatively significant and unavoidable. In addition, Impact AES-2 related to wind would also be applicable to the Reduced Office alternative and also be considered conservatively significant and unavoidable. Existing allowable heights permit buildings that could create adverse wind conditions. The Reduced Office alternative would have the same cumulative significant and unavoidable wind and shadow impacts as the Plan.

(7) Biological Resources

Similar to the Specific Plan, development under the Reduced Office alternative may impact biological resources and implementation of the SCAs would help ensure impacts on biological resources would not be significant.

⁷ CEQA Guidelines, Section 21099(d)(1).

(8) Geology and Soils

Development under the Reduced Office alternative and construction activities and development operations could expose residents to geologic hazards including strong ground shaking during a seismic event, as with the adoption of and development under the Specific Plan. However as previously discussed, substantially less development is anticipated compared to the Plan and would therefore result in fewer new residents and workers in the Plan Area. Individual projects would be required to implement the City's SCAs. The Reduced Office alternative would maintain the same less-than-significant impacts to geology, soils, and geohazards as identified for the Plan, even though the extent of exposure and risks would be reduced given the decreased commercial development.

(9) Hazards and Hazardous Materials

Construction activities under the Reduced Office alternative involving demolition, soil disturbance, and excavation could continue to potentially expose construction workers and residents to potential hazards and hazardous materials as identified for the Specific Plan. The potential hazardous materials include asbestos, PCBs, lead-based paint, underground and aboveground storage tanks, and contaminated soil and water. New construction would have to comply with City SCAs like the Plan, so they would result in the same less-than-significant impacts as identified in the Plan, even though the extent of exposure and risks would be reduced given the decreased commercial development.

(10) Hydrology and Water Quality

Development under the Reduced Office alternative and construction activities could lead to increased contaminants being washed into the San Francisco Bay, as with the adoption and development of the Specific Plan. Development under the Reduced Office alternative could alter drainage patterns and be susceptible to flooding hazards and inundation. However, as previously discussed, new development would be at a smaller scale compared to the Plan and would therefore result in fewer developments in the Plan Area. Individual projects would be required to conform to the City's SCAs. The Reduced Office alternative would maintain the same less-than-significant impacts to water quality as identified in the Plan.

(11) Noise

Development would still occur within the Plan Area under the Reduced Office alternative and construction activities and development operations may create noise impacts, although for proportionally fewer employees. Individual projects will need to conform to the City's SCAs. The Reduced Office alternative would maintain the same less-than-significant impacts on noise identified with the Plan, even with relatively less construction and development operations.

(12) Population and Housing

Development and population and job growth would still occur within the Plan Area under the Reduced Office alternative, although at a lower rate. As a result, there would be approximately 1,900 fewer jobs, a 3 percent decrease within the Plan Area by 2040. The Reduced Office alternative would maintain the same less-than-significant impacts regarding the displacement of substantial housing, people, businesses, and jobs as identified with the Plan.

(13) Public Services, Facilities and Recreation

Development would occur at lower rate within the Plan Area under the Reduced Office alternative, resulting in significantly less demand for public services and recreation facilities. Fewer police, fire, and emergency services and facilities would be needed, and demand for parks and recreational facilities would be reduced. The demand for schools would be the same as the Plan given that the number of housing units would be equal to that proposed in the Specific Plan (29,100 units). It is not anticipated that new physical facilities would be required, the construction of which could have adverse environmental effects. However, as with the Plan impacts, the Reduced Office alternative would still increase the demand for parkland, and the City would continue to fall short of its local-serving parkland goal of 4 acres per 1,000 resident, regardless of adoption and development under the Specific Plan. Therefore, the Reduced Office alternative would continue to have a significant impact related to Impact PUB-1, and Cumulative Impact PUB-1 meeting the City's parkland goal, but it could be mitigated to a less-than-significant level with the two-part Mitigation Measure PUB-2 recommended for the Specific Plan. The Reduced Office alternative would maintain the same less-than-significant impacts to public services (fire services, police services, and libraries) as identified in the Plan.

(14) Utilities

Development would occur at a lower rate within the Plan Area under the Reduced Office alternative, resulting in significantly less demand for utilities and service systems. Less water and energy services and wastewater and solid waste disposal would be needed. It is not anticipated that new physical facilities would be required, the construction of which could have adverse environmental effects. However, given that the City's stormwater collection system is aging and will require improvements to serve the downtown area, Impact UTL-1 and Cumulative Impact UTL-1 would still remain despite the lower rate of development and employment assumed under the Reduced Office alternative. The Reduced Office alternative would maintain the same less-than-significant impacts to wastewater, water, solid waste and energy as identified in the Plan.

D. CEQA ALTERNATIVES CONSIDERED

CEQA requires the identification of the environmentally superior alternative in an EIR. The No Project/No Build alternative is considered the environmentally superior alternative in the strict sense that environmental impacts associated with its implementation would be the least of all the alternatives examined (including the Specific Plan). To maintain the Plan Area at its current conditions would avoid each of the impacts that would result from the Specific Plan. In cases like this where the No Project alternative is the environmentally superior alternative, CEQA requires that the second most environmentally superior alternative be identified. Comparison of the environmental impacts associated with each alternative as described above, indicates that the Partially Mitigated alternative would represent the next-best alternative in terms of the fewest significant environmental impacts. Implementation of the Partially Mitigated alternative would result in slightly reduced environmental impacts than would be produced by the Specific Plan, but would not fully meet the project objectives set forth above..

VIII. CEQA REQUIRED ASSESSMENT CONCLUSIONS

This chapter presents a summary of the impacts of the Downtown Oakland Specific Plan (Specific Plan) in several subject areas specifically required by CEQA Guidelines Section 21100, including growth-inducing impacts, significant unavoidable impacts, significant irreversible environmental changes, and effects not found to be significant. These findings are based on the analysis provided in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures*.

A. GROWTH-INDUCING IMPACTS

The EIR must examine the potential growth-inducing impacts of the Specific Plan. More specifically, CEQA Guidelines require that the EIR “discuss the ways in which the Plan could foster economic or population growth, or the construction of additional housing, either directly or indirectly.”¹ This analysis must also consider the removal of obstacles to population growth, such as improvements in the regional transportation system, if relevant. The Plan Area does not include improvements to regional systems.

Growth-inducing impacts, such as those associated with job increases that might affect housing and retail demand outside the Plan Area over an extended time period, are difficult to assess with precision since future economic and population trends may be influenced by unforeseeable events. Moreover, long-term changes in economic and population growth are often regional in scope; they are not influenced solely by changes in policies or specific development projects. Business trends are influenced by economic conditions throughout the state and country as well as around the world.

Another consideration is that the creation of growth potential does not automatically lead to growth. Growth occurs through capital investment in new economic opportunities by the private or public sector. These investment patterns reflect, in turn, the desires of investors to mobilize and allocate their resources to development in particular localities and regions. These factors, combined with the regulatory authority of local governments, serve to mediate the growth-inducing potential or pressure created by a plan. Despite these limitations on the analysis, it is still possible to qualitatively assess the general potential growth-inducing impacts of the Specific Plan.

¹ CEQA Guidelines Section 15126.2(d).

1. Adoption and Development Under the Specific Plan Would Foster Growth in the Plan Area

The development program established by the Specific Plan is shown below in Table VIII-1. As described in *Chapter III, Project Description*, the development program represents the reasonably foreseeable development expected to occur in the Plan Area over the next 20 years and is thus the level of development envisioned by the Specific Plan and analyzed in this EIR.

TABLE VIII-1 POPULATION AND EMPLOYMENT ESTIMATED GROWTH UNDER THE SPECIFIC PLAN COMPARED TO ESTIMATED PROJECTIONS

	Population	Households	Employment
Growth under the Specific Plan, 2040 ^a	52,600	27,685 ^b	60,730
Growth in DJL PDA 2010-2040	36,640 ^c	19,280	38,430
Projected Growth in Oakland, 2010 – 2040	258,520	87,680	93,670
Specific Plan Growth as Percent of City Growth	20%	32%	65%
Projected Total for City of Oakland, 2040	650,630	241,470	272,760
Specific Plan Total as Percent of City Total	8%	11%	22%

Note: Projections have been rounded to nearest ten.

^a See Table V.L-5, in *Chapter V.I, Population and Housing* Downtown Future Development by Land Use.

^b Calculated by population; used a conversion factor of 1.9 persons per household.

^c 2040 ABAG Projections calculated by number of households; used a conversion factor of 1.9 persons per household.

Source: Association of Bay Area Governments (ABAG), 2018. Plan Bay Area Projections 2040, A Companion to Plan Bay Area 2040, November 2018, Population and Housing. Available at: http://mtcmedia.s3.amazonaws.com/files/Projections_2040-ABAG-MTC-web.pdf, accessed June 3, 2019 except for Growth in JLS 2010-2040 which source is personal correspondence with Aksel Olsen, Metropolitan Planning Commission, Plan Bay Area 2040 Data, TAZ Data, PDA Data, Alameda County, June 7, 2018.

Compared to citywide growth projected for 2010-2040, the Specific Plan’s development program would contribute about 65 percent of the employment growth and about 20 percent of the population growth anticipated (see *Section V.L, Population and Housing*).

2. Adoption and Development under the Specific Plan is Unlikely to Induce Substitutional Additional Growth Outside the Plan Area

a. No Infrastructure-Induced Growth

Typical examples of projects likely to have significant growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project specific demand and the development of new residential subdivisions or industrial parks in areas that are currently only sparsely developed or are undeveloped. In this case, development under

the Specific Plan would occur in already developed areas in a location well-served by existing transportation/transit systems and other infrastructure and utilities. Unlike development on vacant land in an outlying part of the region, development under the Specific Plan would occur in an already-developed urban area and would not require the construction or extension of new roads, utilities, and other infrastructure that might stimulate population and employment growth in previously undeveloped areas. Adoption and development under the Specific Plan could require on-site infrastructure replacements and improvements to accommodate new development for higher densities and new uses. The infrastructure improvements would be specific to the development sites and would not induce substantial additional population growth in other areas.

3. Adoption and Development under the Specific Plan Would Reduce Growth Pressures Elsewhere in the Region

From a regional perspective, adoption and development under the Specific Plan would affect the distribution and location of growth within the East Bay and Bay Area region. It would result in more growth in Oakland and the Plan Area, at the center of the region, and less growth in other areas. As a result of adoption and development under the Specific Plan, retail and commercial developments in the Plan Area would capture activity that would otherwise locate elsewhere in the East Bay and/or Bay Area. Thus, adoption and development under the Specific Plan would facilitate retail and commercial development in a central, regional location with good transportation/transit accessibility from throughout the region. It would facilitate retail and office development in proximity to Oakland consumers thereby reducing their commutes and travel distances for shopping trips.

Adoption and development under the Specific Plan would accommodate more population growth in a location with strong housing demand, thereby reducing demand for housing in more outlying locations. Higher-density housing in the Plan Area, at the center of the region, would likely result in a larger total regional housing supply than would a more dispersed, lower-density pattern of regional development. Furthermore, it would likely result in more housing in proximity to public transportation and employment centers in the Central Bay Area.

4. Summary

Overall, the effects of adoption and development under the Specific Plan on growth would be largely beneficial and are not considered substantial and adverse.

B. SIGNIFICANT IRREVERSIBLE CHANGES

An EIR must identify any significant irreversible environmental changes that could result from adoption and development under the Specific Plan. 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.² 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.

1. Changes in Land Use Which Would Commit Future Generations

The Plan Area is located in an urban area and is developed with existing buildings and infrastructure. Development under the Specific Plan would consist of infill and redevelopment of existing buildings and structures and would not result in significant changes in the overall land use pattern of the Plan Area. In other words, while the Specific Plan supports a heightened emphasis on Transit-Oriented-Development, it does so in the context of an existing dense, urban environment. Because development under the Specific Plan would occur within an urban area surrounded by similar uses, it would not commit future generations to significant changes in land use.

2. Irreversible Changes from Environmental Accidents

No significant irreversible environmental damage, such as the potential result of an accidental spill or explosion of hazardous materials, is anticipated due to adoption and development under the Specific Plan. Furthermore, compliance with federal, State, and local regulations, and the implementation of the City's Standard Conditions of Approval associated with hazards and hazardous materials (SCAs 43, 44, 45) identified in *Section V.I, Hazards and Hazardous Materials*, would reduce the possibility that hazardous substances within the Plan Area would cause significant environmental damage to a less-than-significant level.

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. The Plan Area is located within an urban area of Oakland; no agricultural land would be converted to non-agricultural uses. The Plan

² CEQA Guidelines Section 15126.2(c).

Area does not contain known mineral resources and does not serve as a mining reserve. Adoption and development under the Specific Plan would require the use of energy, including energy produced from non-renewable resources. However, the future development projects under the Specific Plan would incorporate energy-conserving features, as required by the Uniform Building Code and California Energy Code Title 24, the City's Green Building Ordinance, and, as applicable, the City's Standard Conditions of Approval.

C. SIGNIFICANT UNAVOIDABLE ENVIRONMENTAL IMPACTS

A significant and unavoidable (SU) impact would result if a project was to reach or exceed the defined threshold of significance and no feasible mitigation measure were available to reduce the significant impact to a less-than-significant level.³ Adoption and development under the Specific Plan would result in the following SU impacts, as identified in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures*.

1. Traffic and Transportation

Impact TRANS-1: The bus-only lanes proposed in the Specific Plan may overlap with the Specific Plan's proposed low stress bike network potentially generating transportation conflicts between bicycle and transit along corridors where both are proposed.

Impact TRANS-2: Development under the Specific Plan would generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard.

Impact TRANS-3: The development under the Specific Plan would contribute to the significant degradation of several CMP or MTS segments in 2020.

2. Air Quality

Impact AIR-1: Operation of some large development projects under the Specific Plan could result in cumulatively considerable net increase of criteria air pollutants for which the region is in nonattainment.

³ CEQA Guidelines Section 15126(b).

3. Cultural Resources

Impact CULT-1: Adoption of the Specific Plan and its associated development is anticipated to result in the demolition, destruction, or relocation of historical resources either as individual resources or as contributors to historic districts.

Impact CULT-2: Alterations to Historic Buildings that could occur under the Specific Plan could change the significance and character of historic resources as a result of the Specific Plan.

4. Aesthetics

Impact AES-1:(Shadow): Implementation of the Downtown Specific Plan and development that may occur under the Plan may result in substantial new shadow that would shade solar collectors, passive solar heaters, public open space, or historic resources, or otherwise result in inadequate provision of adequate light. (Conservatively SU)

Impact AES-2 (Wind): Implementation of the Downtown Specific Plan and development that may occur under the Plan may result in adverse wind conditions. (Conservatively SU)

D. CUMULATIVE IMPACTS

CEQA defines cumulative impacts as “two or more individual effects which, when considered together, are considerable, or which can compound or increase other environmental impacts.” Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts that are individually limited, but cumulatively considerable. Per Section 15065(a)(3) of the CEQA Guidelines, “cumulatively considerable” means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of likely future projects. Adoption and development under the Specific Plan would result in the following SU cumulative impacts, as identified in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures*.

Cumulative Impact TRANS-1: Development under the Specific Plan together with cumulative development would generate additional multi-modal traffic traveling across the at-grade railroad crossings that would cause or expose roadway users (e.g., motorists, pedestrians, bus riders, bicyclists) to a permanent or substantial transportation hazard.

Cumulative Impact TRANS-2: The development under the Specific Plan would degrade from LOS E or better to LOS F or increase the v/c ratio by 0.03 or more for segments at LOS F on the following CMP or MTS segments in 2040.

Cumulative Impact CULT-1: Adoption of and development under the Specific Plan, combined with cumulative development in the Plan Area and citywide, including past, present, existing, approved, pending, and reasonably foreseeable future development, would contribute to a significant and unavoidable adverse cumulative impact to cultural and historical resources.

Cumulative Impact AES-1: Implementation of the Downtown Specific Plan and development that may occur under the Plan may, in combination with other past, present, and reasonably foreseeable future projects within and around the Plan Area, would result in significant cumulative wind and shadow impacts.

E. EFFECTS FOUND NOT TO BE SIGNIFICANT

The environmental topics analyzed in *Chapter V, Setting, Impacts, Standard Conditions of Approval, and Mitigation Measures*, represent the topics that generated the greatest potential controversy and expectation of adverse impacts among City staff and members of the public. The following topics were excluded from discussion in this EIR because it was determined during the scoping phase of the project that impacts would be less than significant: Agriculture and Forest Resources; Mineral Resources; Energy; and Tribal Cultural Resources. Section 15128 of the CEQA Guidelines requires that the EIR “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”. The project’s impacts related to each of these topics are described in *Chapter VI, Effects Found Not to be Significant*.

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7. Alternatives

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8. CEQA Required Assessment Conclusions

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D. PERSONAL COMMUNICATION

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